

Indice

Azienda e Servizi	4
Condizioni generali di vendita	6
Organizzazione commerciale	7
Canali e bande televisive	8
Antenne	9
Elettronica da palo e da interno	47
Centrali di testa	66
Fibra ottica	105
Multiswitch	117
Distribuzione	143
Indice dei prodotti	165

Company

Fracarro

Established in 1933, Fracarro is today one of the most important companies in Europe in the field of reception and distribution of audio video data signals and active security.

The synergy between the two sectors allows Fracarro to propose integrated solutions for the creation of intelligent buildings and dwellings to connect and interact actively worldwide. Our aim is to guarantee the supply of high quality products with particular care to all connected services dedicated to the operators within that sector.

Today the company is able to guarantee a comprehensive catalogue of systems in the sector of audio, video and data for the reception and distribution of AVD signals: terrestrial and satellite antennas, amplifiers, mixers, power supplies, headends and distribution components.

With the introduction of DTT and having extensive experience in foreign markets, Fracarro is considered a reference point for solutions relating to the introduction of new technology.



European directives conformity

Fracarro's products are compliant, if applicable, to the following European Directives:

- 2014/53/UE (RED – Apparecchiature Radio)
- 2014/30/UE (EMC – Compatibilità Elettromagnetica)
- 2014/35/UE (LVD – Bassa Tensione)
- 2011/65/UE (RoHS – Restrizione uso Sostanze Pericolose)
- 305/2011 (CPR – Prodotti da costruzione)

As they exceeded tests specified in the technical harmonized standards, carried out by leading accredited laboratories. Such products are identified by the CE marking.

More info about the Quality Policy on www.fracarro.com.



Attention to the environment

non tradotto

To guarantee this we have chosen to join Consorzio ReMedia, a primary Collective System that guarantees consumers the correct treatment and recovery of WEEE and BATTERIES and the promotion of policies aimed at protecting the environment.

MEMBER OF

Remedia

PASSIONE PER L'AMBIENTE

Certifications of the Quality Management System

The Fracarro Quality Management System is oriented towards satisfying the requirements of all the interested parties. To guarantee the achievement of this goal, we have chosen to certify the Quality Management System, according to the requirements of ISO9001: 2015, with a primary Certification Body such as CSQ.



Web site and social network

The Fracarro website allows to be constantly updated on the news and the company's initiatives. In particular, the Technical Assistance section provides useful information to support operators in their professional activity, relying on a direct line with the headquarters staff. Fracarro is also present in the major social network to be even closer to the professionals.



Technical assistance

Fracarro provides technical assistance to solve any installation problem in the fastest way. The service is available in each Fracarro company, with specialised staff ready to provide information or define projects.

non tradotto

Contatti Assistenza Tecnica

Telefono +39 0423 7361

Fax +39 0423 736220

WhatsApp 335 776 2667

supportotecnico@fracarro.com
www.fracarro.com, sezione Assistenza

Hangouts supportotecnico@fracarro.com

Case history

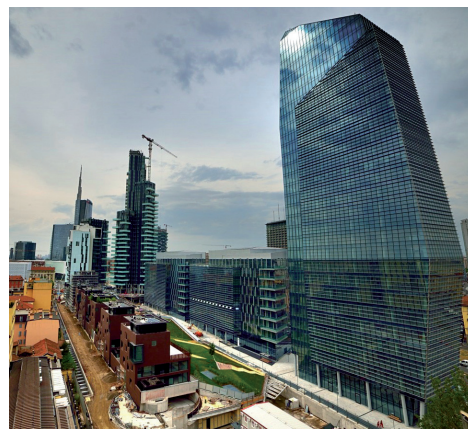
Diamante, Diamantini, Aria, Solaria and Solea Towers, Villas, Porta Nuova Milano

Fibre Optic system

The complex, consisting of several buildings, including the Diamante skyscraper, is equipped with a Fracarro TV and Satellite system, realised with a cluster programmable headend (offices) and with a modular K Series headend (residential area). The distribution of the signals in the residential area has been realised with mixed technologies, fiber optic and coaxial, while in office the innovative Home Fibre Fracarro has been used.

The numbers of the system:

- over 100 fibre links
- over 1400 sockets
- more than 35.000 metres of coax cable



Bosco verticale, Isola Milano

Fibre Optic system

Winner of the "International Highrise Award" in 2014 as the most beautiful and innovative skyscraper in the world, Bosco Verticale is equipped with a Fracarro TV and Satellite distribution system. The installation is composed by an agile multicluster headend and by a K series headend for the reshaping of 2 in digital terrestrial satellite transponders. The system has been realised with mixed technology, fiber optic and coaxial.

The numbers of the system:

- over 800 sockets
- SAT signals also for PVR (My Sky)



Hotel Excelsior Venice Lido Resort, Venezia

IP-TV System

The prestigious Venetian hotel chose Fracarro to realise the new IPTV system, through which it has been possible to integrate different technologies and services into a single solution, with a significant simplification of the structure.

For the management of the signals the new generation HeadLine headend was used, composed of modules for the conversion of digital terrestrial and satellite signals in IP. The contents were then managed by the IT service with a distribution over LAN, without using the coaxial cables.



Advantages:

- Reduction of masonry works thanks to the fibre optic distribution. Ready for the connection with the hotel management software (PMS)
- Availability of TV and Satellite signals as well as Internet on every LAN ports of the hotel (wired, but also reached by wi-fi)
- Distribution of more than 100 Italian and foreign programs (free and pay)
- Remote control of headend, both for ordinary maintenance, for example the change of the channel list without intervention on the TV terminals or tablet, and the management of the anomalies.

TV standards

CCIR - Standard

Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz
Standard B + G Europe											
Band I				S23	318-326	322	319.25	Band V			
E 2	47-54	50.5	48.25	S24	326-334	330	327.25	E38	606-614	610	607.25
E 3	54-61	57.5	55.25	S25	334-342	338	335.25	E39	614-622	618	615.25
E 4	61-68	64.5	62.25	S26	342-350	346	343.25	E40	622-630	626	623.25
Band S				S27	350-358	354	351.25	E41	630-638	634	631.25
S 1	104-111	107.5	105.25	S28	358-366	362	359.25	E42	638-646	642	639.25
S 2	111-118	114.5	112.25	S29	366-374	370	367.25	E43	646-654	650	647.25
S 3	118-125	121.5	119.25	S30	374-382	378	375.25	E44	654-662	658	655.25
S 4	125-132	128.5	126.25	S31	382-390	386	383.25	E45	662-670	666	663.25
S 5	132-139	135.5	133.25	S32	390-398	394	391.25	E46	670-678	674	671.25
S 6	139-146	142.5	140.25	S33	398-406	402	399.25	E47	678-686	682	679.25
S 7	146-153	149.5	147.25	S34	406-414	410	407.25	E48	686-694	690	687.25
S 8	153-160	156.5	154.25	S35	414-422	418	415.25	E49	694-702	698	695.25
S 9	160-167	163.5	161.25	S36	422-430	426	423.25	E50	702-710	706	703.25
S10	167-174	170.5	168.25	S37	430-438	434	431.25	E51	710-718	714	711.25
Band III				S38	438-446	442	439.25	E52	718-726	722	719.25
E 5	174-181	177.5	175.25	S39	446-454	450	447.25	E53	726-734	730	727.25
E 6	181-188	184.5	182.25	S40	454-462	458	455.25	E54	734-742	738	735.25
E 7	188-195	191.5	189.25	S41	462-470	466	463.25	E55	742-750	746	743.25
E 8	195-202	198.5	196.25	Band IV				E56	750-758	754	751.25
E 9	202-209	205.5	203.25	E21	470-478	474	471.25	E57	758-766	762	759.25
E10	209-216	212.5	210.25	E22	478-486	482	479.25	E58	766-774	770	767.25
E11	216-223	219.5	217.25	E23	486-494	490	487.25	E59	774-782	778	775.25
E12	223-230	226.5	224.25	E24	494-502	498	495.25	E60	782-790	786	783.25
Band S				E25	502-510	506	503.25	LTE			
S11	230-237	233.5	231.25	E26	510-518	514	511.25	E61	790-798	794	791.25
S12	237-244	240.5	238.25	E27	518-526	522	519.25	E62	798-806	802	799.25
S13	244-251	247.5	245.25	E28	526-534	530	527.25	E63	806-814	810	807.25
S14	251-258	254.5	252.25	E29	534-542	538	535.25	E64	814-822	818	815.25
S15	258-265	261.5	259.25	E30	542-550	546	543.25	E65	822-830	826	823.25
S16	265-272	268.5	266.25	E31	550-558	554	551.25	E66	830-838	834	831.25
S17	272-279	275.5	273.25	E32	558-566	562	559.25	E67	838-846	842	839.25
S18	279-286	282.5	280.25	E33	566-574	570	567.25	E68	846-854	850	847.25
S19	286-293	289.5	287.25	E34	574-582	578	575.25	E69	854-862	858	855.25
S20	293-300	296.5	294.25	E35	582-590	586	583.25				
S21	302-310	306	303.25	E36	590-598	594	591.25				
S22	310-318	314	311.25	E37	598-606	602	599.25				

CCIR - Standard

Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz	Channel	Channel frequency MHz	Digital central frequency MHz	Analogue picture carrier MHz
Standard D Russia - OIRT				Standard I South Africa				Standard K French overseas territories			
R 1	48.5-56.5	52.5	49.75	Band III				Band III			
R 2	58-66	62	59.25	I 4	174-182	178	175.25	K 4	174-182	178	175.25
R 3	76-84	80	77.25	I 5	182-190	186	183.25	K 5	182-190	186	183.25
Band II				I 6	190-198	194	191.25	K 6	190-198	194	191.25
R 4	84-92	88	85.25	I 7	198-206	202	199.25	K 7	198-206	202	199.25
R 5	92-100	96	93.25	I 8	206-214	210	207.25	K 8	206-214	210	207.25
Band III				I 9	214-222	218	215.25	K 9	214-222	218	215.25
R 6	174-182	182	175.25	I 10	222-230	226	223.25				
R 7	182-190	190	183.25	I 11	230-238	234	231.25				
R 8	190-198	198	191.25	I (12)	238-246	242	239.25				
R 9	198-206	206	199.25	I 13	246-254	250	247.25				
R 10	206-214	214	207.25								
R 11	214-222	222	215.25								
R 12	222-230	230	223.25								

Level conversion table (75Ω)

mV	dBμV	dBm	mV	dBμV	dBm
0.10	40	-68.8	12.59	82	-26.8
0.12	42	-66.8	15.85	84	-24.8
0.16	44	-64.8	19.95	86	-22.8
0.20	46	-62.8	25.12	88	-20
0.25	48	-60.8	31.62	90	-18.8
0.31	50	-58.8	39.81	92	-16.8
0.39	52	-56.8	50.12	94	-14.8
0.50	54	-54.8	63.10	96	-12.8
0.63	56	-52.8	79.43	98	-10.8
0.79	58	-50.8	100.00	100	-8.8
1.00	60	-48.8	125.89	102	-6.8
1.26	62	-46.8	158.49	104	-4.8
1.58	64	-44.8	199.53	106	-2.8
2.00	66	-42.8	251.19	108	-0.8
2.51	68	-40.8	316.23	110	1.2
3.16	70	-38.8	398.11	112	3.2
3.98	72	-36.8	501.19	114	5.2
5.01	74	-34.8	630.96	116	7.2
6.31	76	-32.8	794.33	118	9.2
7.94	78	-30.8	1000.00	120	11.2
10.00	80	-28.8			

Comparison noise figure and signal-noise ratio

Noise figure	Kto	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
	dB	4.8	5.4	6.0	6.5	7.0	7.4	7.8	8.1	8.4	8.7	9.0
Noise voltage at 75 Ohm	dBμV	7.1	7.7	8.3	8.8	9.3	9.7	10.1	10.4	10.7	11.0	11.3

Countries which have completed Analogue Switch Off (ASO)

Country	Standard	Compression	Country	Standard	Compression
Austria	DVB-T/DVB-T2	MPEG-2	Latvia	DVB-T/ DVB-T2	MPEG-4 AVC
Belgium	DVB-T	MPEG-2	Luxemburg	DVB-T	MPEG-2
Croatia	DVB-T	MPEG-2	Norway	DVB-T	MPEG-4 AVC
Czech rep.	DVB-T/DVB-T2	MPEG-2	Netherlands	DVB-T	MPEG-2
Denmark	DVB-T	MPEG-2/MPEG-4 AVC	Portugal	DVB-T	MPEG-4 AVC
Estonia	DVB-T/DVB-T2	MPEG-4 AVC	Slovak rep.	DVB-T/DVB-T2	MPEG-2
Finland	DVB-T/DVB-T2	MPEG-2	Slovenia	DVB-T	MPEG-4 AVC
France	DVB-T	MPEG-2/MPEG-4 AVC	Spain	DVB-T/DVB-T2	MPEG-2
Germany	DVB-T	MPEG-2	Sweden	DVB-T/DVB-T2	MPEG-2
Ireland	DVB-T	MPEG-2	Switzerland	DVB-T	MPEG-2
Italy	DVB-T/ DVB-T2	MPEG-4 AVC	UK	DVB-T/DVB-T2	MPEG-2
Lithuania	DVB-T/ DVB-T2	MPEG-4 AVC			

Sources: www.digitag.org - www.dvb.org (DTT deployment data at May 2013)

Main transmission standards

DTT	DVB-T	DVB-T2
Modulation	COFDM	COFDM
Number of sub carriers	2K, 8K	1K, 2K, 4K, 8K, 16K, 32K
Sub carriers modulation	QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM, 256QAM
FEC	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 3/5, 2/3, 3/4, 4/5, 5/6
Guard interval	1/4, 1/8, 1/16, 1/32	1/4, 19/256, 1/8, 19/128, 1/16, 1/32
Bandwidth	6, 7 or 8MHz	1.7, 5, 6, 7, 8, 10MHz
Maximum useful bit-rate	About 31.6Mbps	About 50Mbps
SAT	DVB-S	DVB-S2
Modulation	QPSK	QPSK, 8PSK, 16APSK, 32APSK
FEC	1/2, 2/3, 3/4, 5/6, 7/8	1/4, 1/3, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10

Available bit rates for a DVB-T system in 8MHz channels

Modulation	Codification value	Guard interval				Modulation	Codification value	Guard interval			
		1/4	1/8	1/16	1/32			1/4	1/8	1/16	1/32
QPSK	1/2	4.98	5.53	5.85	6.03	64QAM	1/2	14.93	16.59	17.56	18.10
	2/3	6.64	7.37	7.81	8.04		2/3	19.91	22.12	23.42	24.13
	3/4	7.46	8.29	8.78	9.05		3/4	22.39	24.88	26.35	27.14
	5/6	8.29	9.22	9.76	10.05		5/6	24.88	27.65	29.27	30.16
	7/8	8.71	9.68	10.25	10.56		7/8	26.13	29.03	30.74	31.67
16QAM	1/2	9.95	11.06	11.71	12.06						
	2/3	13.27	14.75	15.61	16.09						
	3/4	14.93	16.59	17.56	18.10						
	5/6	16.59	18.43	19.52	20.11						
	7/8	17.42	19.35	20.49	21.11						

FM and DAB

FM and DAB Series	12
-------------------	----

VHF

BAND III Serie	13
BLV Serie	14
SIGMA V2 HD Series	15

UHF LTE

TAU LTE Series	16
BLU LTE Series	17
LAMBDA LTE Series	18
SIGMALTE Series	19
ELIKA Series	20
ELIKA PRO Series	21

COMBO LTE

COMBO LTE Series	22
------------------	----

LOG PERIODIC

LP III IV Series	23
LP LTE Series	24
LP LTE Series	25
LP LTE Series	26

LTE KIT
UHF

LP Series	29
PANNELLO Series	30
YAGI CHANNEL GROUPED Serie	31
YAGI GRID Serie	32
YAGI TUBE Serie	33
TAU GRID Serie	34
TAU TUBE Serie	35

UHF

OMEGA Serie	36
BLU Serie	37
SIGMA Series	38

POLE

TELESCOPIC MASTS	39
MASTS WITH NUTS	39
ELBOW MASTS	39

AERIAL ACCESSORIES

ADJUSTABLE BRACKETS	40
---------------------	----

DISHES

PENTA Serie	44
60-85 cm OFFSET DISHES Serie	45
100-150 cm OFFSET DISHES Serie	46

LNB

UNIVERSAL LNB Serie	47
SCD2 (dCSS) LNB Serie	47

SATELLITE KIT

KIT SAT Serie	48
DiSeqC Serie	48
AMPLIFIER Serie	48

FM and DAB

FM and DAB Series

FM and DAB band aerials complete with F connector. Different design for the radio signals reception



ANT1200A

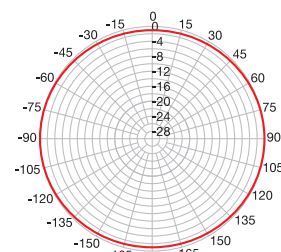
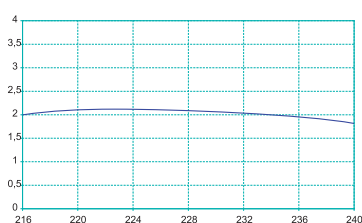
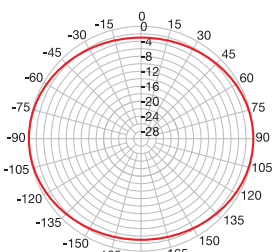
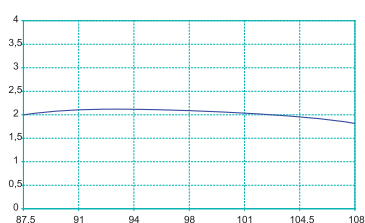
FM OMNI



DAB

		ANT1200A	FM OMNI	DAB
Code		213001	213009	213010
Elements	No.	1	1	1
Bands		FM	FM	DAB
Channels		-	-	DAB
Freq. band	MHz	87.5-108	87.5-108	216-240
Gain	dBi	2.1	2.1	2.1
Front-to-back ratio	dB	Omni	Omni	Omni
Return loss	dB	-16	-6	-16
Beamwidth (-3dB)	°	360	360	360
Wind load at 120Km/h (720N/m2)	Kg (N)	3 (29.43)	2.7 (26.46)	2 (19.62)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	96 x 77	63 x 10.5	59 x 8
Multiple packaging quantity	Pcs	10	10	8
Unit weight	Kg	0.90	0.84	0.54
Total weight with packaging	Kg	10.6	8.6	4.4
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		N/A	N/A	N/A
Vertical polarisation		-	-	-
Vertical polarisation with tilt adjustment		-	-	-
Auxiliary boom		N/A	N/A	N/A

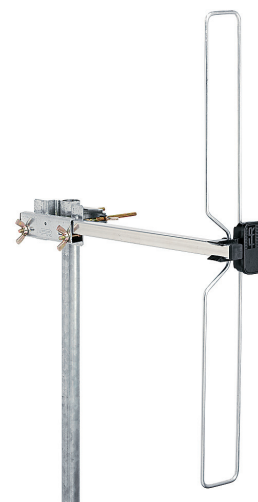
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@105MHz for ANT1200A and FMOMNI, @230MHz for DAB)



ANT1200A

FM OMNI

DAB



VHF

BAND III Serie

Band III aeralis complete with F connector.

E512 with 4 and 6 elements.

TERZA 6HD high quality, premounted aerial.



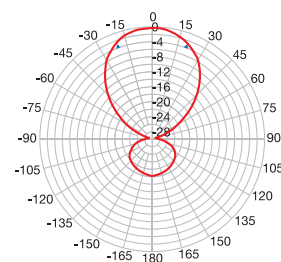
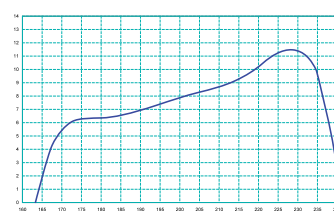
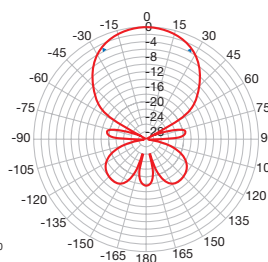
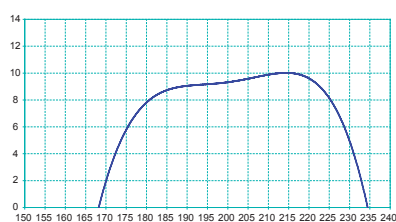
6E512_F



TERZA 6HD

		4E512_F	6E512_F	TERZA 6HD
Code		218706	218718	213008
Elements	No.	4	6	6
Bands		3	3	3
Channels		E5-E12	E5-E12	E5-E12
Freq. band	MHz	174-230	174-230	174-230
Gain	dBi	7	10	11
Front-to-back ratio	dB	16	18	25
Return loss	dB	-10	-12	-15
Beamwidth (-3dB)	°	±35	±28	±26
Wind load at 120Km/h (720N/m2)	Kg (N)	2.0 (19.62)	3.0 (29.13)	3.8 (37.24)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	108 x 83	181 x 82	119 x 86
Multiple packaging quantity	Pcs	20	20	10
Unit weight	Kg	0.73	0.96	1.20
Total weight with packaging	Kg	15.6	20.2	1.2
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	MEC3603G - MEC3603Z
Vertical polarisation		PV10 (210011)	PV10 (210011)	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	MEC3603G - MEC3603Z
Auxiliary boom		N/A	N/A	CA2 (219602)

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)



6E512_F

TERZA 6HD



VHF

BLV Serie

Band III aerials complete with F connector.
High **gain**, optimum impedance adaptation and excellent directivity.

Exclusive Fracarro design



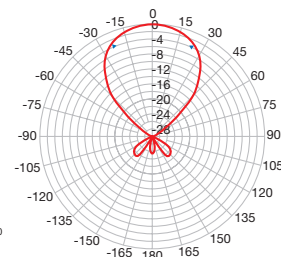
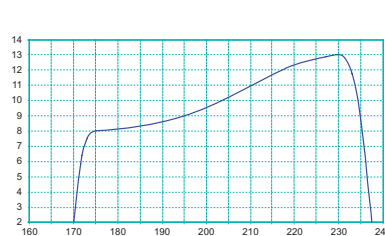
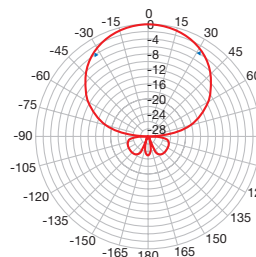
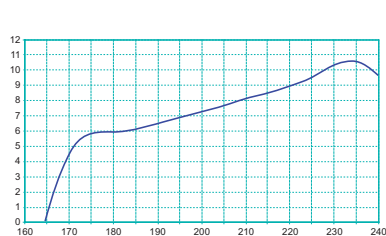
BLV4F



BLV6F

		BLV4F	BLV6F
Code		218038	218058
Elements	No.	4	6
Bands		3	3
Channels		E5-E12	E5-E12
Freq. band	MHz	174-230	174-230
Gain	dBi	10.5	13
Front-to-back ratio	dB	20	24
Return loss	dB	-23	-22
Beamwidth (-3dB)	°	±31	±24
Wind load at 120Km/h (720N/m2)	Kg (N)	3.0 (29.43)	4.5 (44.14)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	64 x 87	149 x 87
Multiple packaging quantity	Pcs	10	3
Unit weight	Kg	1.23	2.00
Total weight with packaging	Kg	14.5	6.0
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		PV10 (210011)	PV10 (210011)
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)



BLV4F

BLV6F



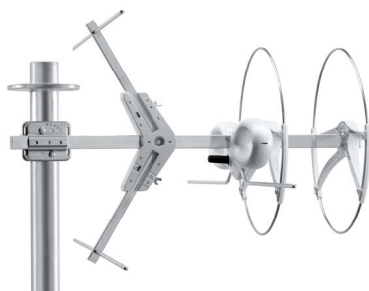
VHF

SIGMA V2 HD Series

Band III aerials complete with F connector.

Tool less mounting thanks to its **quick coupling** radiator, reflector and director elements.

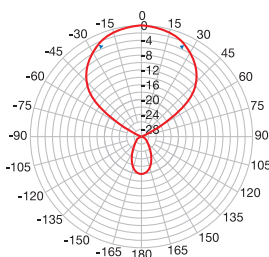
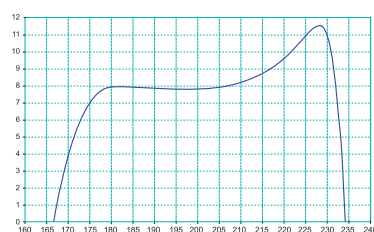
Exclusive design patented by Fracarro.



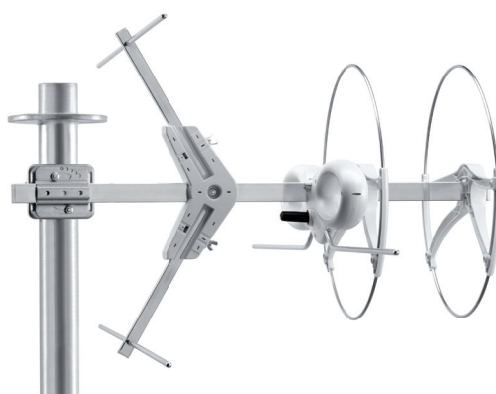
SIGMA V2 HD

SIGMA V2 HD		
Code		213203
Elements	No.	2
Bands		3
Channels		E5-E12
Freq. band	MHz	174-230
Gain	dBi	11.5
Front-to-back ratio	dB	25
Return loss	dB	-12
Beamwidth (-3dB)	°	±25
Wind load at 120Km/h (720N/m2)	Kg (N)	10 (98)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	76 x 100
Multiple packaging quantity	Pcs	1
Unit weight	Kg	2.76
Total weight with packaging	Kg	2.76
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)



SIGMA V2 HD



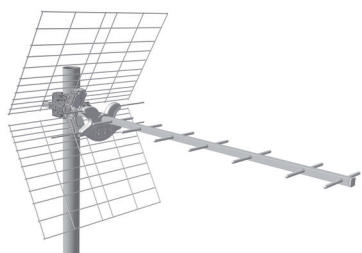
UHF LTE

TAU LTE Series

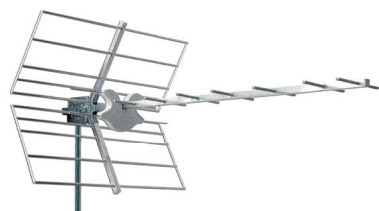
UHF band Yagi aerial complete with F connector
Redesigned geometrical director dipoles distribution in order to obtain a better LTE signal filtering.

Particular mechanical strength thanks to 8mm extruded aluminium tubes

These aerials benefit also from a **built in LTE filter** within the dipole.



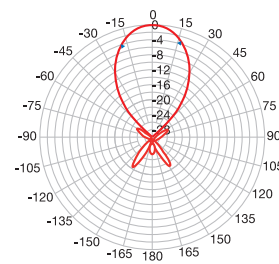
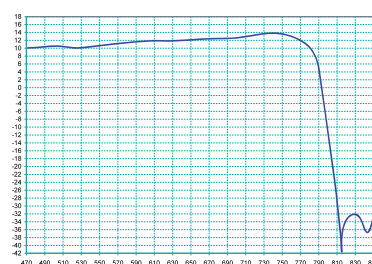
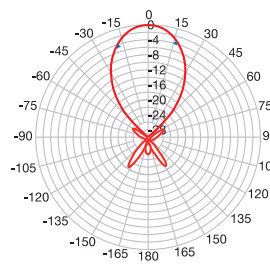
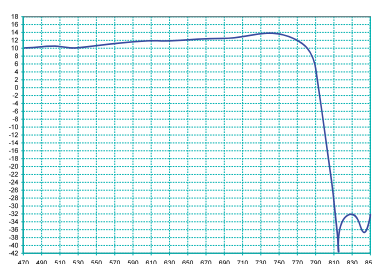
TAU LTE KILLER



TAU LTE KILLER+

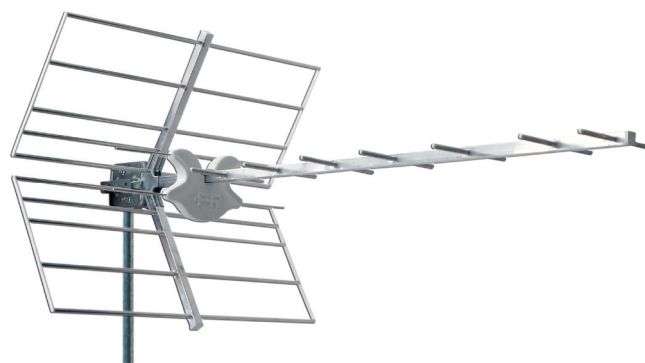
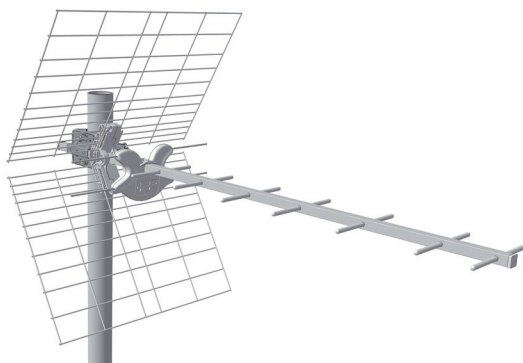
		TAU LTE KILLER	TAU LTE KILLER+
Code		213103	213104
Elements	No.	7	7
Bands		UHF	UHF
Channels		E21-E60	E21-E60
Freq. band	MHz	470-790	470-790
Gain	dBi	14	14
Front-to-back ratio	dB	38	38
Return loss	dB	-18	-18
Beamwidth (-3dB)	°	±21	±21
Wind load at 120Km/h (720N/m2)	Kg (N)	5.3 (51.94)	5.3 (51.94)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	1170 x 497	1170 x 497
Multiple packaging quantity	Pcs	1	1
Unit weight	Kg	1.75	1.75
Total weight with packaging	Kg	1.9	1.9
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



TAU LTE KILLER

TAU LTE KILLER+



UHF LTE

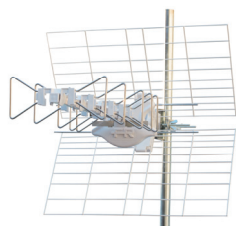
BLU LTE Series

UHF band biconical aerial complete with F connector and grid reflectors.

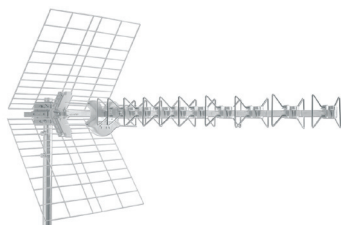
Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **wingnut**.

High **gain**, optimum impedance adaptation and excellent directivity.

This aerial benefits from a **built in LTE filter** within the dipole.



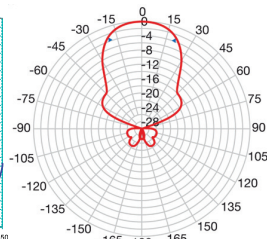
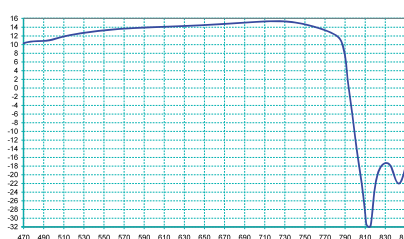
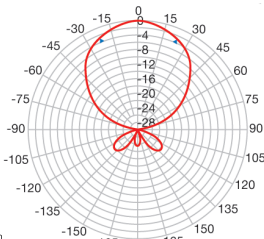
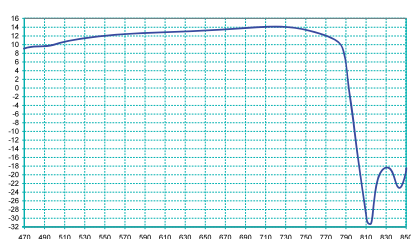
BLU5HDLTE



BLU10HDLTE

		BLU5HDLTE	BLU10HDLTE	BLU22HDLTE
Code		217910	217909	217912
Elements	No.	5	10	22
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E60	E21-E60
Freq. band	MHz	470-790	470-790	470-790
Gain	dBi	14	16	18,5
Front-to-back ratio	dB	30	30	30
Return loss	dB	-16	-16	-18
Beamwidth (-3dB)	°	±25	±22	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	5.7 (55.86)	7.2 (70.56)	12.2 (119.65)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	84 x 50	119 x 50	242 x 50
Multiple packaging quantity	Pcs	10	10	1
Unit weight	Kg	1.75	2.22	3.54
Total weight with packaging	Kg	19.4	24.6	35
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

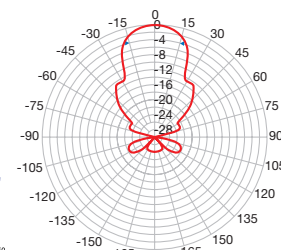
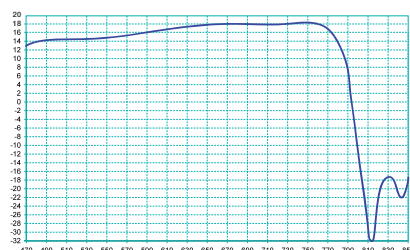
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



BLU5HDLTE

BLU10HDLTE

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



BLU22HDLTE

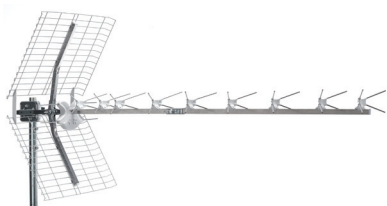
UHF LTE

LAMBDA LTE Series

UHF band Yagi aerial complete with F connector
Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

High gain, optimum mechanical strength and excellent front-to-back ratio.



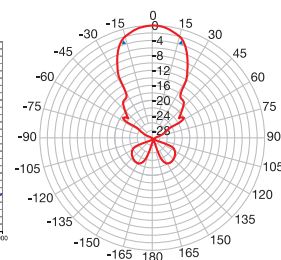
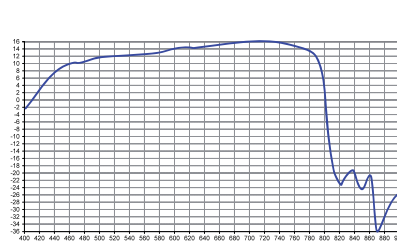
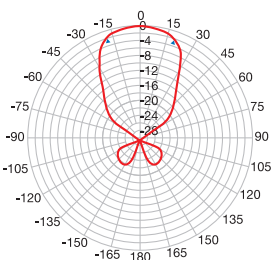
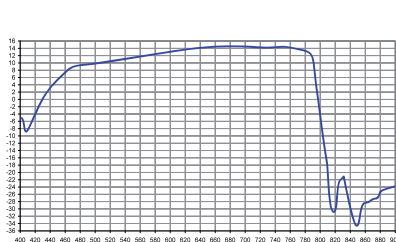
LAMBDA 9 LTE



LAMBDA 14 LTE

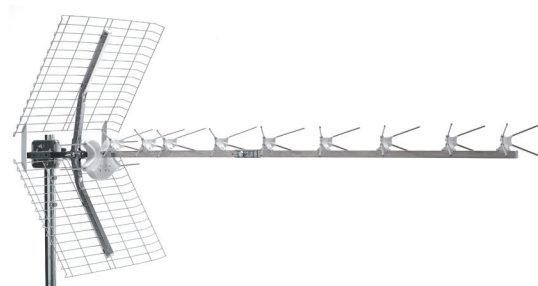
		LAMBDA 9 LTE	LAMBDA 14 LTE
Code		213057	213058
Elements	No.	9	14
Bands		UHF	UHF
Channels		E21-E60	E21-E60
Freq. band	MHz	470-790	470-790
Gain	dBi	14.5	16
Front-to-back ratio	dB	24	26
Return loss	dB	-16	-16
Beamwidth (-3dB)	°	±20	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	15 (147.15)	17.5 (171.67)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	152 x 50	177 x 50
Multiple packaging quantity	Pcs	1	1
Unit weight	Kg	2.72	3.38
Total weight with packaging	Kg	2.7	3.4
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



LAMBDA 9 LTE

LAMBDA 14 LTE



UHF LTE

SIGMALTE Series

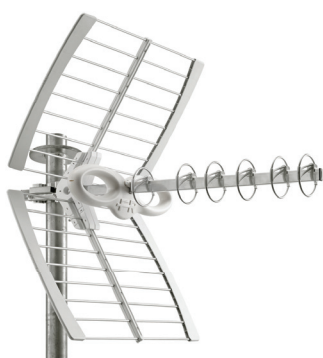
UHF band Loop Yagi aerial complete with F connector

Tool less mounting ELIKA series, thanks to premounted elements, quick coupling radiator and reflectors, mast bracket with zenith adjustment and **large wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

High gain, excellent directivity and almost total absence of side lobes.

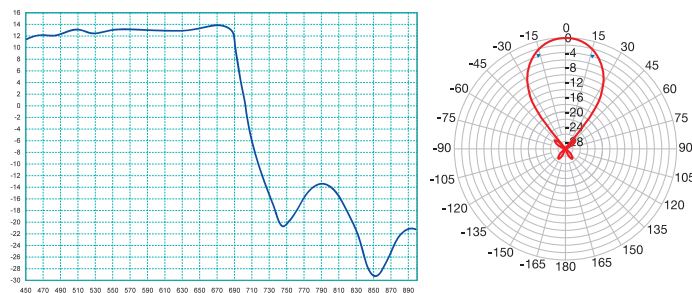
Exclusive design patented by Fracarro.



SIGMA 6HD LTE

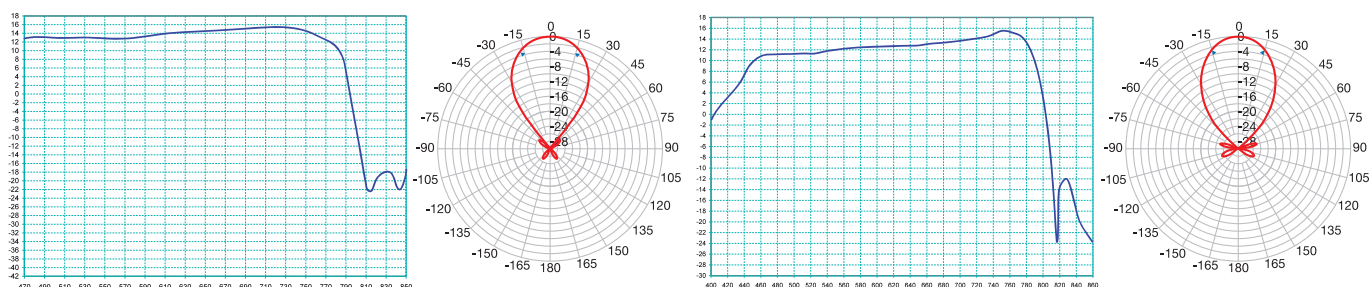
		SIGMA6HD LTE700	SIGMA 6HD LTE	SIGMA 8HD LTE
Code		213224	213219	213213
Elements	No.	6	6	8
Bands		UHF	UHF	UHF
Channels		E21-E48	E21-E60	E21-E60
Freq. band	MHz	470-694	470-790	470-790
Gain	dBi	14	15	16
Front-to-back ratio	dB	32	32	32
Return loss	dB	-18	-18	-18
Beamwidth (-3dB)	°	±18	±18	±17
Wind load at 120Km/h (720N/m2)	Kg (N)	23 (225.4)	23 (225.4)	23 (225.4)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	92 x 62	92 x 62	119 x 62
Multiple packaging quantity	Pcs	4	4	4
Unit weight	Kg	2.30	2.30	2.77
Total weight with packaging	Kg	12.0	12.0	16.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



SIGMA6HD LTE700

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



SIGMA 6HD LTE

SIGMA 8HD LTE

UHF LTE

ELIKA Series

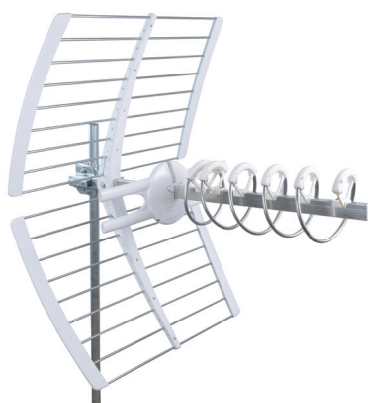
Helical UHF band aerial with F connector, it is an evolution of the Loop Yagi technology, already adopted to Fracarro

Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

High gain, excellent directivity and almost total absence of side lobes.

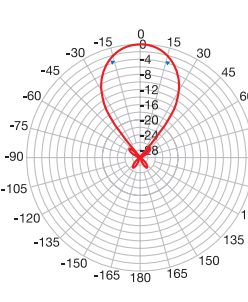
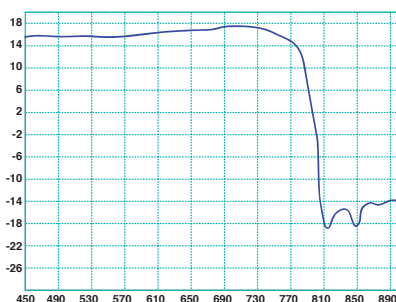
Exclusive Erika design patented by Fracarro.



ELIKA

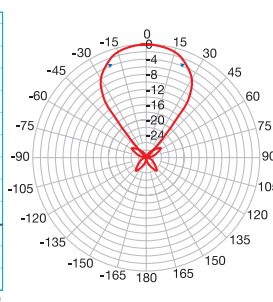
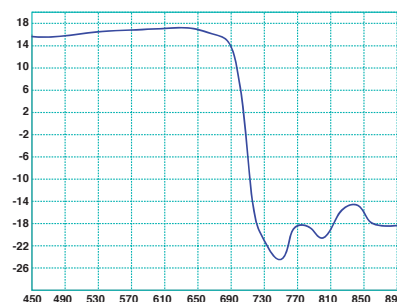
		ELIKA	ELIKA 700 P	ELIKA 700 C
Code		213226	213228	213229
Elements	No.	1	1	1
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E48	E21-E48
Freq. band	MHz	470-790	470-694	470-694
Gain	dBi	17,5	17	17
Front-to-back ratio	dB	32	32	32
Return loss	dB	-18	-18	-18
Beamwidth (-3dB)	°	±18	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	19 (186.2)	19 (186.2)	19 (186.2)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	92 x 82 x 62	92 x 82 x 62	92 x 82 x 62
Multiple packaging quantity	Pcs	8	8	6
Unit weight	Kg	2.30	2.30	2.30
Total weight with packaging	Kg	23	23	18
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A
Single packaging		Plastic bag	Plastic bag	cardboard packaging

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



ELIKA

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



ELIKA 700 P e ELIKA 700 C

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)



UHF LTE

ELIKA PRO Series

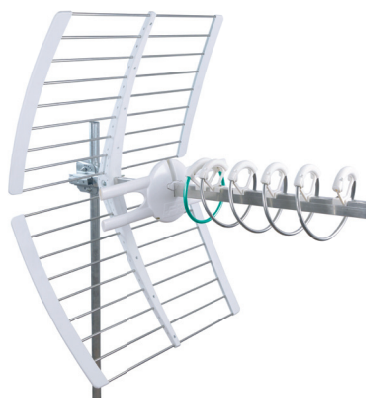
Active helical UHF band aerial complete with F connector and **an LED alignment system and an automatic gain control (AGC)**. It is an evolution of the Loop Yagi technology, already adopted to Fracarro

Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

High gain, excellent directivity and almost total absence of side lobes.

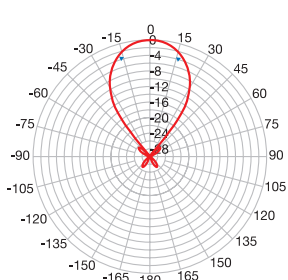
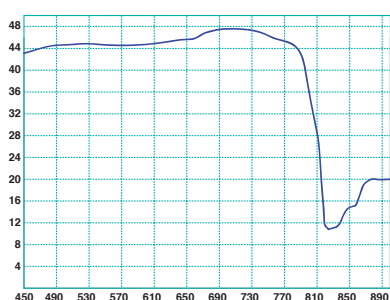
Exclusive Erika design patented by Fracarro.



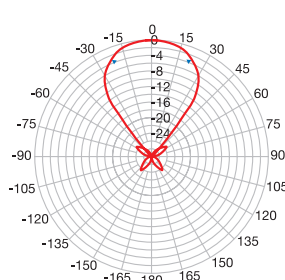
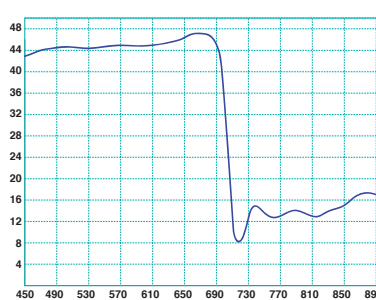
ELIKA PRO

		ELIKA PRO	ELIKA PRO 700 P	ELIKA PRO 700 C
Code		213227	213230	213231
Elements	No.	1	1	1
Bands		UHF	UHF	UHF
Channels		E21-E60	E21-E48	E21-E48
Freq. band	MHz	470-790	470-694	470-694
Gain	dBi	47,5	47	47
CAG dynamics	dBμV	65-80	65-80	65-80
Fixed output level	dBμV	98	98	98
Supply voltage	V	12-24	12-24	12-24
Current cons.	mA	45	45	45
Front-to-back ratio	dB	32	32	32
Return loss	dB	-15	-15	-15
Beamwidth (-3dB)	°	±18	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	19 (186.2)	19 (186.2)	19 (186.2)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions (L x H x W)	cm	92 x 82 x 62	92 x 82 x 62	92 x 82 x 62
Multiple packaging quantity	Pcs	8	8	6
Unit weight	Kg	2.30	2.30	2.30
Total weight with packaging	Kg	23	23	18
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@790MHz)



Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@600MHz)

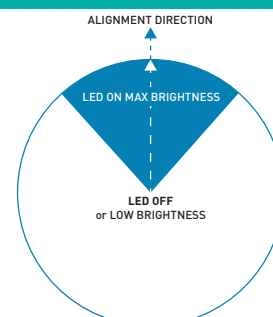
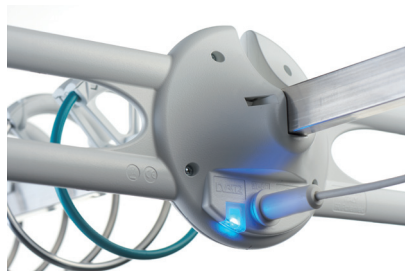


ELIKA PRO

ELIKA PRO 700 P e ELIKA PRO 700 C

LED alignment system

Elika PRO is the only aerial with LED assisted alignment



COMBO LTE

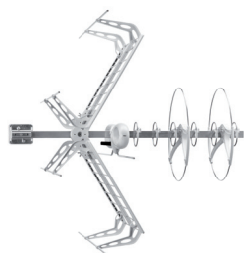
COMBO LTE Series

UHF and III bands Biconical and Loop Yagi aerial complete with F connector.

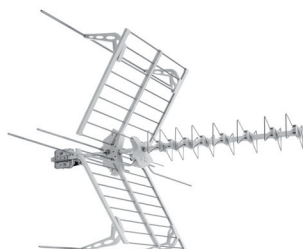
#b#Tool less mast mounting #b# thanks to premounted elements, quick coupling radiator and reflectors, mast bracket with zenith adjustment and **wingnut**.

This aerial benefits from a **built in LTE filter** within the dipole.

Exclusive design patented by Fracarro.



SIGMA COMBO LTE

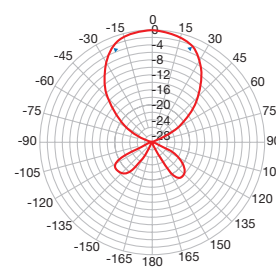
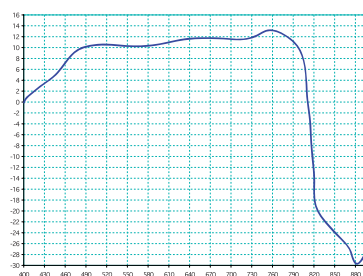
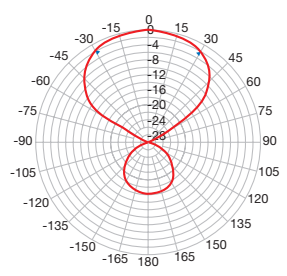
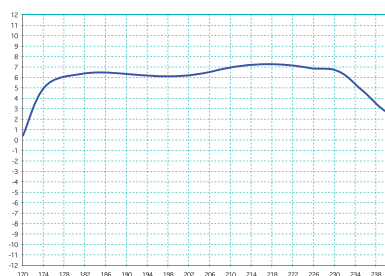


BLU COMBO LTE

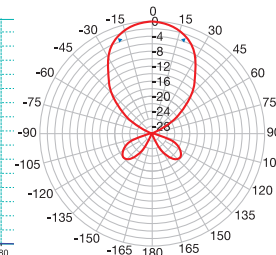
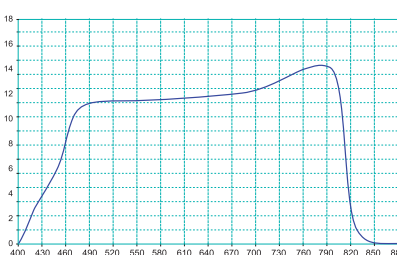
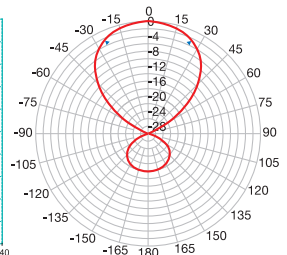
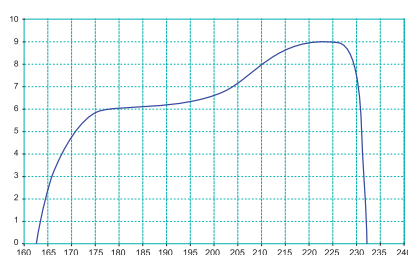
		BLU COMBO LTE	SIGMA COMBO LTE
Code		217911	213223
Elements	No.	4 / 8	6 / 6
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	7 / 13	9 / 14
Front-to-back ratio	dB	20 / 32	20 / 32
Return loss	dB	-14 / -18	-14 / -18
Beamwidth (-3dB)	°	±25 / ±20	±25 / ±20
Wind load at 120Km/h (720N/m2)	Kg (N)	9 (88.2)	26 (256)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	118 x 100	108 x 100
Multiple packaging quantity	Pcs	8	6
Unit weight	Kg	2.76	3.83
Total weight with packaging	Kg	26.0	27.0
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		Included	Included
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		Included	Included
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



BLU COMBO LTE



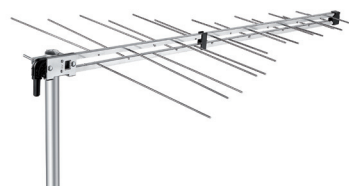
SIGMA COMBO LTE

LOG PERIODIC

LP III IV Series

Log-periodic pre-assembled aerials for **III and IV bands** characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**



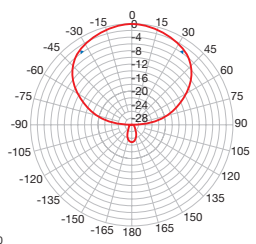
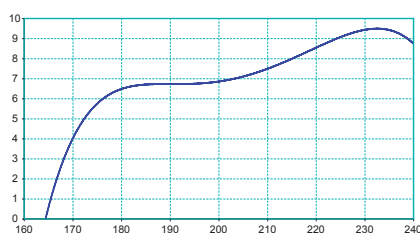
LP34F



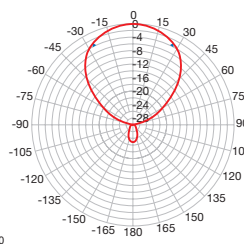
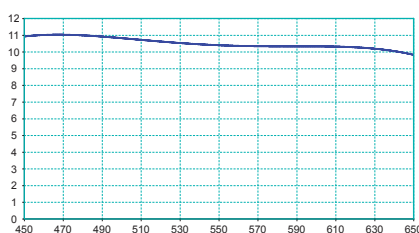
LP3F

		LP34F	LP3F	LP4F
Code		216135	216171	216151
Elements	No.	14	6	8
Bands		3+4	3	4
Channels		E5-E12 / E21-E37	E5-E12	E21-E37
Freq. band	MHz	174-230 / 470-606	174-230	470-606
Gain	dBi	9.5 / 11	9	10
Front-to-back ratio	dB	21 / 25	32	32
Return loss	dB	-18 / -15	-18	-18
Beamwidth (-3dB)	°	±35 / ±28	±32	±28
Wind load at 120Km/h (720N/m2)	Kg (N)	2.8 (27.46)	2.8 (27.46)	2.8 (27.46)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	115 x 86	65 x 33	99 x 32
Multiple packaging quantity	Pcs	20	60	20
Unit weight	Kg	1.13	0.56	0.79
Total weight with packaging	Kg	23.0	38.0	16.3
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)

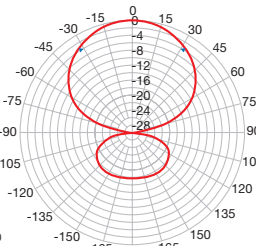
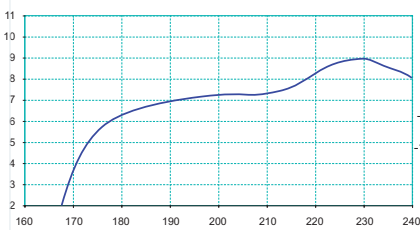


Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)

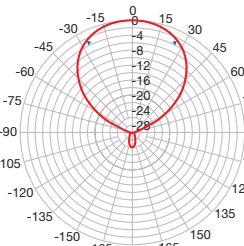
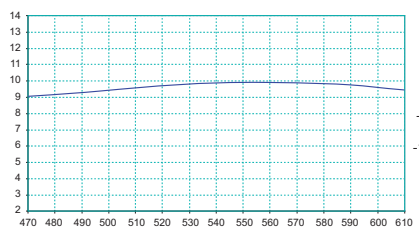


LP34F

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)



Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)



LP3F

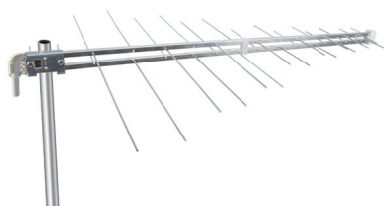
LP4F

LOG PERIODIC

LP LTE Series

Log-periodic pre-assembled aeralis characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

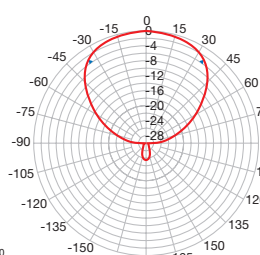
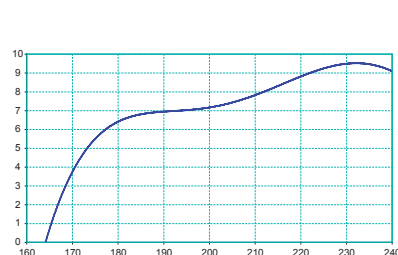
Due to the specific mast clamp these aeralis can be assembled in **vertical or horizontal polarisation without additional accessories**. Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.



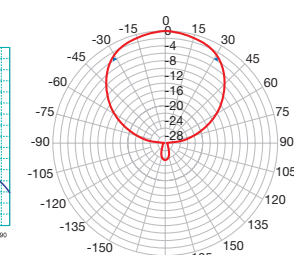
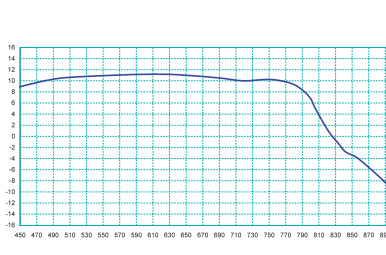
LP345F LTE

		LP345F LTE	LP345MF LTE
Code		216270	216269
Elements	No.	16+16	15+15
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	9 / 11	8.5 / 9.5
Front-to-back ratio	dB	24 / 32	22 / 30
Return loss	dB	-16 / -16	-14 / -13
Beamwidth (-3dB)	°	±34 / ±31	±34 / ±30
Wind load at 120Km/h (720N/m2)	Kg (N)	3.9 (38.25)	2.7 (26.48)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	115 x 86	77 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	1.12	0.90
Total weight with packaging	Kg	22.9	18.5
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)

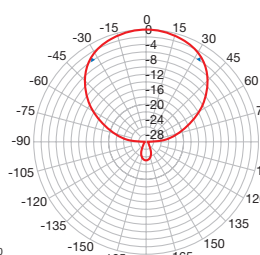
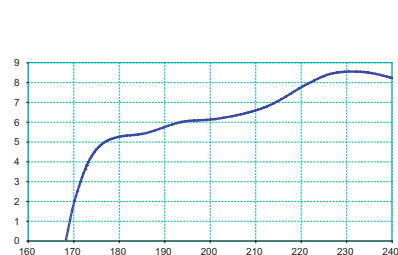


Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)

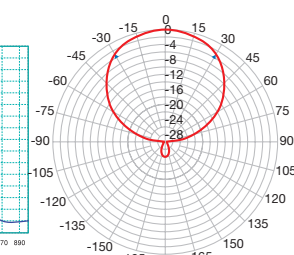
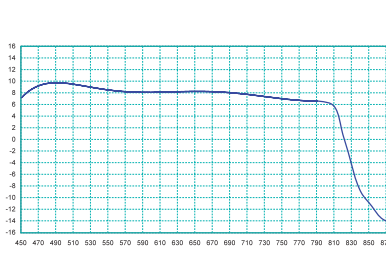


LP345F LTE

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)



Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



LP345MF LTE

LOG PERIODIC

LP LTE Series

Log-periodic pre-assembled aeralis characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

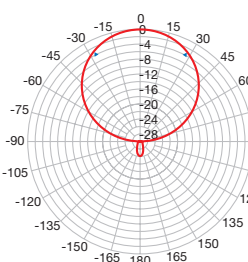
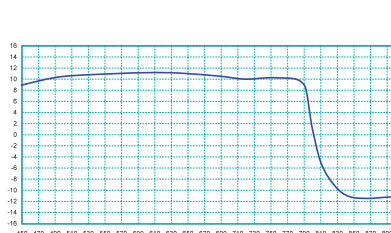
Due to the specific mast clamp these aeralis can be assembled in **vertical or horizontal polarisation without additional accessories**. Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.



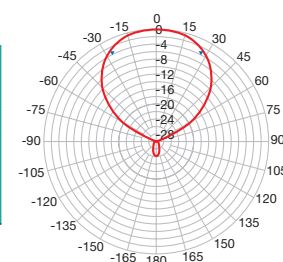
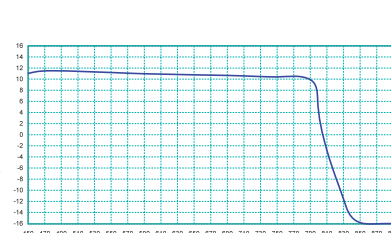
LP45F LTE

		LP45F LTE	LP45NF LTE	LP5F LTE
Code		216249	216250	216208
Elements	No.	14+14	15+15	14+14
Bands		UHF	UHF	5
Channels		E21-E60	E21-E60	E38-E60
Freq. band	MHz	470-790	470-790	606-790
Gain	dBi	11	11.5	12
Front-to-back ratio	dB	36	36	36
Return loss	dB	-15	-15	-15
Beamwidth (-3dB)	°	±28	±25	±25
Wind load at 120Km/h (720N/m2)	Kg (N)	3.0 (29.43)	3.0 (29.43)	3.0 (29.43)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	99 x 32	116 x 86	99 x 24
Multiple packaging quantity	Pcs	15	20	20
Unit weight	Kg	0.80	0.88	0.77
Total weight with packaging	Kg	13.2	18.0	15.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



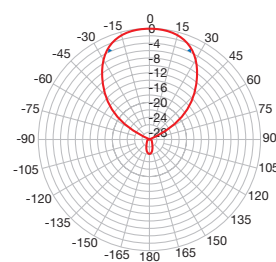
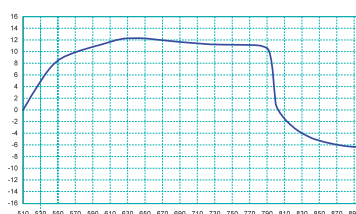
Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



LP45F LTE

LP45NF LTE

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



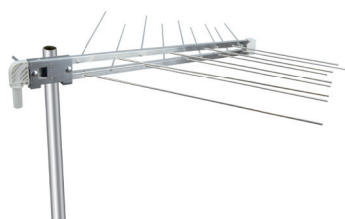
LP5F LTE

LOG PERIODIC

LP LTE Series

Log-periodic pre-assembled aerals characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

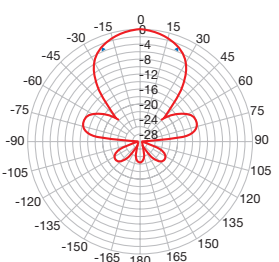
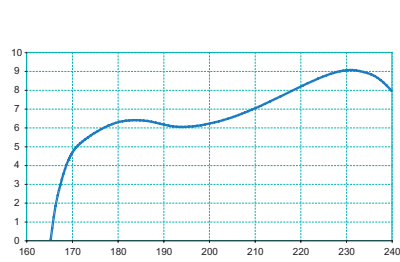
Due to the specific mast clamp these aerals can be assembled in **vertical or horizontal polarisation without additional accessories**. Geometrical dipole distribution has been **redesigned** in order to obtain a good LTE filtering.



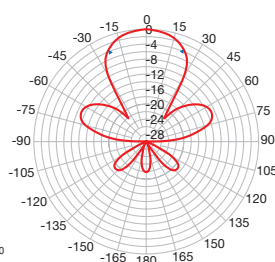
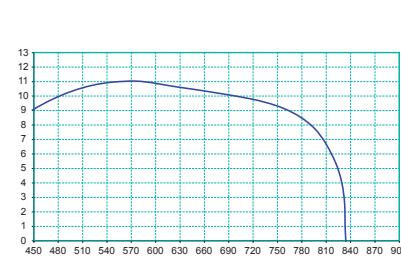
LPV345F LTE

		LPV345F LTE	LP345HV LTE
Code		217250	216268
Elements	No.	9+9	16+16
Bands		3 / UHF	3 / UHF
Channels		E5-E12 / E21-E60	E5-E12 / E21-E60
Freq. band	MHz	174-230 / 470-790	174-230 / 470-790
Gain	dBi	9 / 11.5	9 / 11
Front-to-back ratio	dB	24 / 32	24 / 32
Return loss	dB	-18 / -13	-13 / -13
Beamwidth (-3dB)	°	±23 / ±21	±34 / ±31
Wind load at 120Km/h (720N/m2)	Kg (N)	2.8 (27.46)	3.9 (38.25)
Connector	Type	F	Clamp
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	65 x 79	111 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	0.85	1.04
Total weight with packaging	Kg	17.5	21.3
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@200MHz)

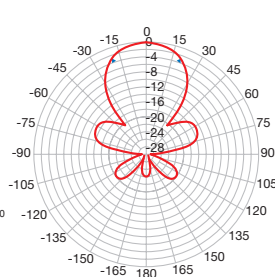
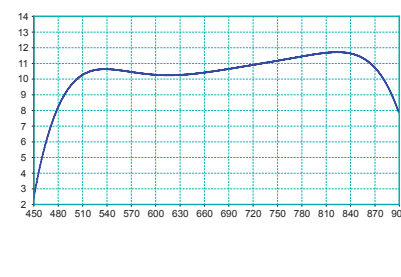
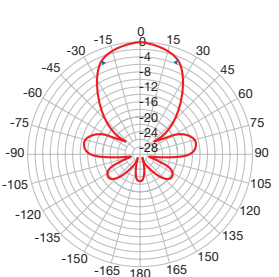
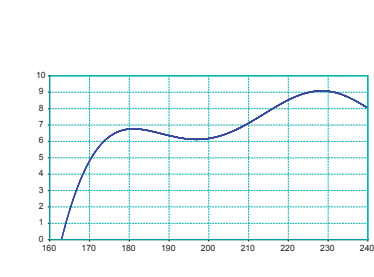


Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



LPV345F LTE

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@790MHz)



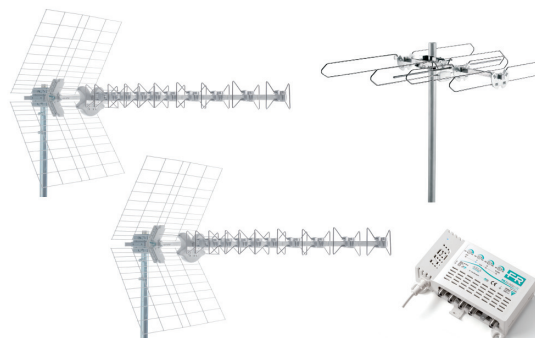
LP345HV LTE

LTE KIT

KIT 1 EVO

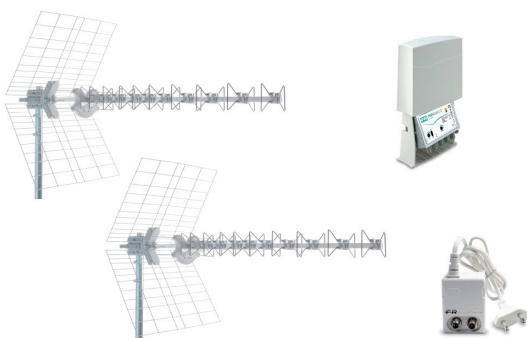
217935

Composed by 1 BLU10HD LTE + 1 BLV4F + 1 MAP2r345U LTE + 1 MINIPower12P


KIT 2 LTE

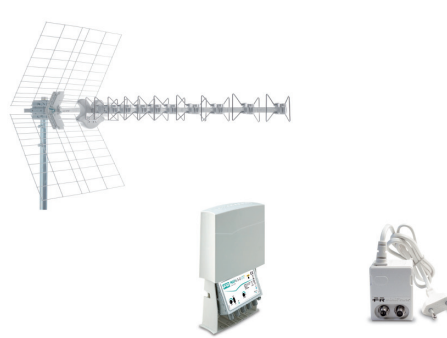
217922

Composed by 2 BLU10HD LTE + 1 BLV4F + 1 MAP2r345U LTE + 1 MINIPower12P


KIT 3 EVO

217936

Composed by 2 BLU10HD LTE + 1 MAP2r345U LTE + 1 MINIPower12P


KIT 4 EVO

217937

Composed by 1 BLU10HD LTE + 1 MAP2r345U LTE + 1 MINIPower12P


KIT 6 EVO

217938

Composed by 1 BLU 5 HD LTE + 1 TERZA 6HD + 1 MAP3r3UU LTE + 1 MINIPower12P


KIT 7 EVO

217939

Composed by 1 BLU 10 HD LTE + 1 TERZA 6HD + 1 MAP3r3UU LTE + 1 MINIPower12P



KIT 8 EVO

217940

Composed by 1 ELIKA + 1 BLV6F + 1 MAP3r3UU LTE + 1 MINIPOWER12P



KIT 9 EVO

217941

Composed by 1 SIGMA COMBO LTE + 1 MAP2r3+U LTE + 1 MINIPOWER12P



KIT 10 EVO

217942

Composed by 1 ELIKA + 1 BLV6F + 1 MAP2r345U LTE + 1 MINIPOWER12P



KIT 11 EVO

217943

Composed by 2 ELIKA + 1 MAP3r3UU LTE + 1 MINIPOWER12P



KIT 12 EVO

217944

Composed by 2 ELIKA + 1 MAP2r345U LTE + 1 MINIPOWER12P



KIT 13 EVO

217945

Composed by 1 BLU COMBO LTE + 1 MAP2r3+U LTE + 1 MINIPOWER12P

UHF

LP Series

Log-periodic pre-assembled aerials characterized by: extremely easy connection due to the **F connector** being located near the mast clamp.

Due to the specific mast clamp these aerials can be assembled in **vertical or horizontal polarisation without additional accessories**



LP345HV

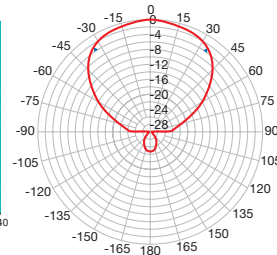
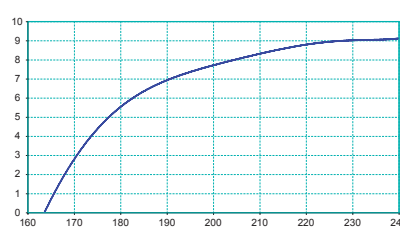
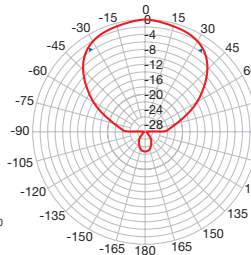
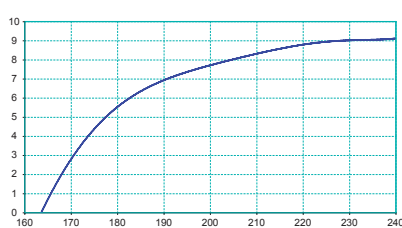


LPV345HV

		LP345HV	LPV345HV
Code		216168	217349
Elements	No.	16	9
Bands		3+UHF	3+UHF
Channels		E5-E12 / E21-E69	E5-E12 / E21-E69
Freq. band	MHz	174-230 / 470-862	174-230 / 470-862
Gain	dBi	9 / 11	9 / 11.5
Front-to-back ratio	dB	24 / 32	24 / 32
Return loss	dB	-13 / -13	-18 / -18
Beamwidth (-3dB)	°	±34 / ±31	±23 / ±21
Wind load at 120Km/h (720N/m2)	Kg (N)	3.9 (38.25)	3.9 (38.25)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	60	60
Dimensions	cm	111 x 86	111 x 86
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	1.04	0.80
Total weight with packaging	Kg	21.3	16.5
Accessories			
Horizontal polarisation		Included	Included
Horizontal polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Vertical polarisation		Included	Included
Vertical polarisation with tilt adjustment		PV10 (210011)	PV10 (210011)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)

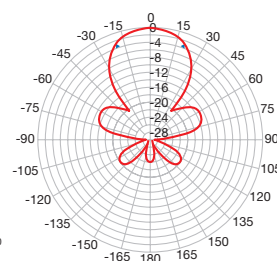
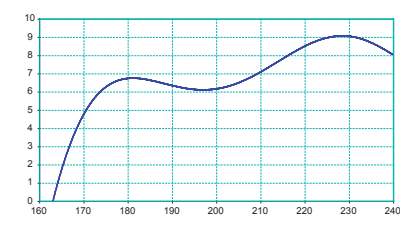
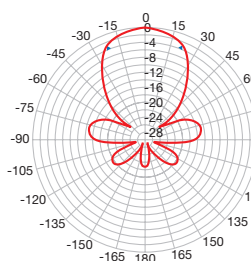
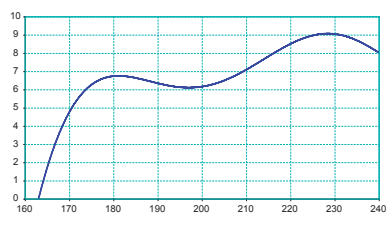
Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



LP345HV

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@200MHz)

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



LPV345HV

UHF

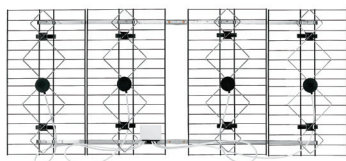
PANNELLO Series

UHF band single and multiple panels aeriels complete with F connector.

Thanks to very low vertical section it is possible to install these aeriels also on **particular weather conditions**, for example where it snows



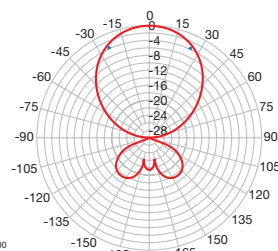
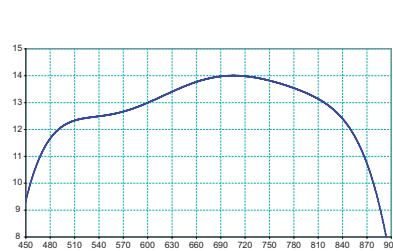
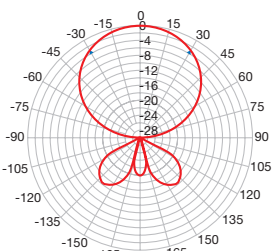
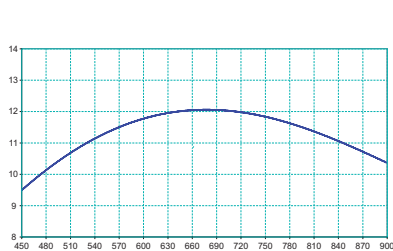
PU4F



PU16F

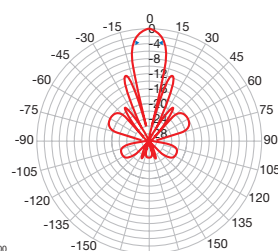
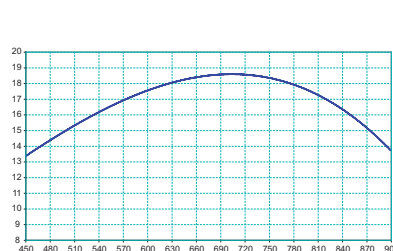
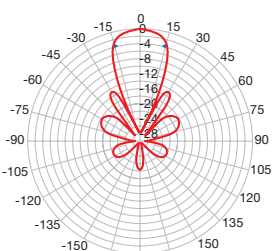
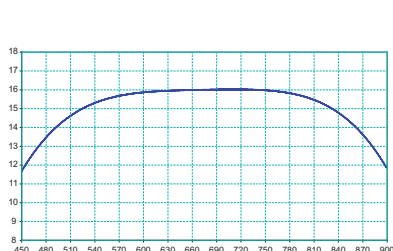
		PU4F	PU4AF	PU8F	PU16F
Code		217424	217423	217428	217436
Elements	No.	4	4	8	16
Bands		UHF	UHF	UHF	UHF
Channels		E21-E69	E21-E69	E21-E69	E21-E69
Freq. band	MHz	470-862	470-862	470-862	470-862
Gain	dBi	12	14	16	18.5
Front-to-back ratio	dB	21	20	26	28
Return loss	dB	-14	-14	-10	-10
Beamwidth (-3dB)	°	±30	±24	±15	±10
Wind load at 120Km/h (720N/m ²)	Kg (N)	4.0 (39.24)	5.0 (49.05)	13 (127.53)	26 (255.06)
Connector	Type	F	F	F	F
Impedance	Ohm	75	75	75	75
Max mast diameter Ø	mm	60	60	60	60
Dimensions	cm	71 x 38	50 x 76	88.5 x 72	167 x 72
Multiple packaging quantity	Pcs	15	10	1	1
Unit weight	Kg	0.96	1.30	2.90	5.28
Total weight with packaging	Kg	14.8	13.3	2.9	5.3
Accessories					
Horizontal polarisation		Included	Included	Included	Included
Horizontal polarisation with tilt adjustment		N/A	N/A	N/A	N/A
Vertical polarisation	PVP (210002)		PVP (210002)	N/A	N/A
Vertical polarisation with tilt adjustment		N/A	N/A	N/A	N/A
Auxiliary boom		N/A	N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



PU4F

PU4AF



PU8F

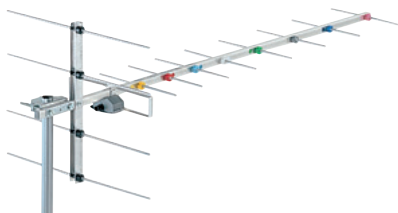
PU16F

UHF

YAGI CHANNEL GROUPED Serie

Yagi **channel grouped** aerials complete with F connector.

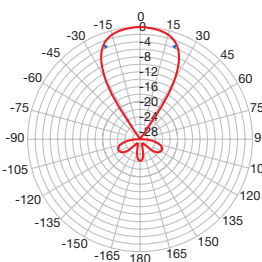
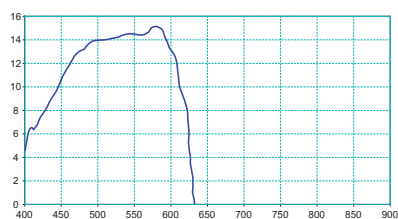
Easy to ship and stockpile thanks to packaging compact dimensions



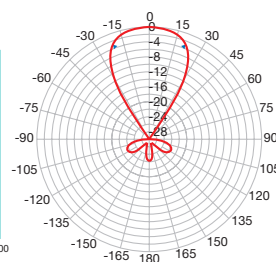
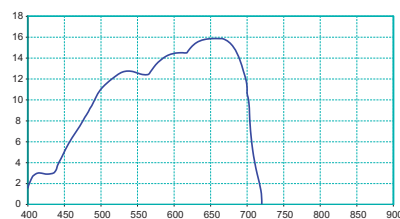
10F2734

		10F2734	10F3546
Code		219532	219541
Elements	No.	10	10
Bands		-	-
Channels		E27-E34	E35-E46
Freq. band	MHz	518-582	582-678
Gain	dBi	15	16
Front-to-back ratio	dB	25	30
Return loss	dB	-23	-21
Beamwidth (-3dB)	°	±21	±20
Wind load at 120Km/h (720N/m2)	Kg (N)	2.6 (25.48)	2.4 (23.52)
Connector	Type	F	F
Impedance	Ohm	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60
Dimensions	cm	111 x 32	110 x 28
Multiple packaging quantity	Pcs	20	20
Unit weight	Kg	0.70	0.62
Total weight with packaging	Kg	14.4	12.8
Accessories			
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@560MHz)

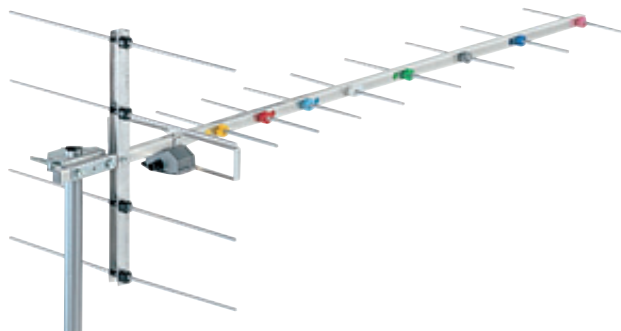


Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@650MHz)



10F2734

10F3546

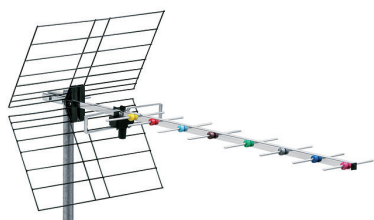


UHF

YAGI GRID Serie

IV, V or UHF band Yagi aerial complete with F connector and grid reflectors.

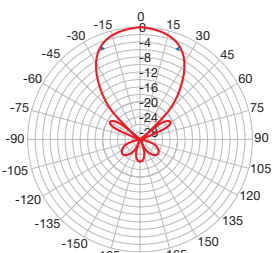
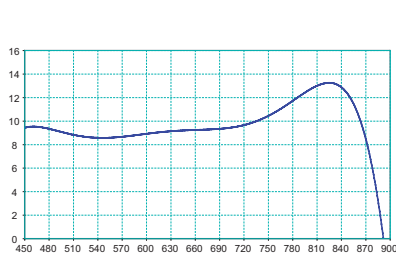
Easy to ship and stockpile thanks to packaging compact dimensions



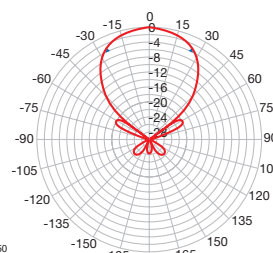
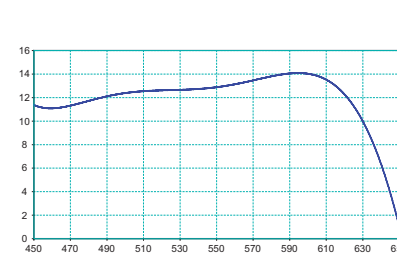
10RD45F

		10RD45F	10RD4F	10RD5F
Code		219546	219506	219507
Elements	No.	10	10	10
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	13	14	13.5
Front-to-back ratio	dB	24	26	24
Return loss	dB	-20	-22	-18
Beamwidth (-3dB)	°	±26	±25	±24
Wind load at 120Km/h (720N/m2)	Kg (N)	2.5 (24.52)	2.9 (28.44)	2.5 (24.52)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60	42 / 60
Dimensions	cm	99 x 36	137x36	103x36
Multiple packaging quantity	Pcs	20	20	20
Unit weight	Kg	0.50	0.62	0.50
Total weight with packaging	Kg	13.0	15.4	13
Accessories				
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adjustment		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



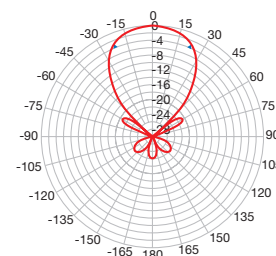
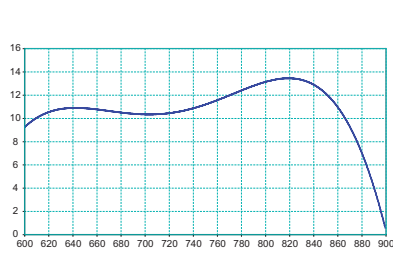
Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)



10RD45F

10RD4F

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



10RD5F

UHF

YAGI TUBE Serie

IV, V or UHF band Yagi aerial complete with F connector and tube reflectors.

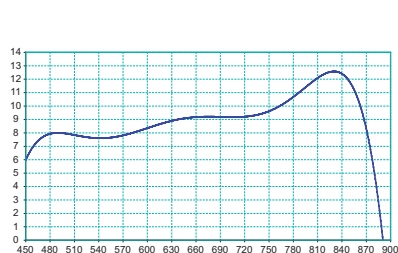
Easy to ship and stockpile thanks to packaging compact dimensions



10BL45F

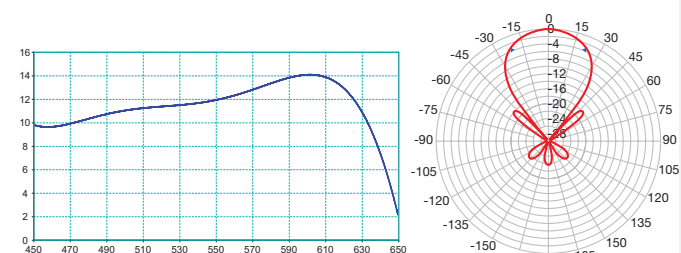
		10BL45F	10BL4F	10BL5F
Code		219446	219406	219407
Elements	No.	10	10	10
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12.5	14	13.5
Front-to-back ratio	dB	24	27	22
Return loss	dB	-16	-22	-17
Beamwidth (-3dB)	°	±28	±24	±27
Wind load at 120Km/h (720N/m2)	Kg (N)	2.3 (22.56)	2.8 (27.46)	2.3 (22.56)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	42 / 60	42 / 60	42 / 60
Dimensions (l x h)	cm	94 x 36	135 x 36	103 x 28
Multiple packaging quantity	Pcs	20	20	20
Unit weight	Kg	0.63	0.75	0.61
Total weight with packaging	Kg	15.5	18.0	15.2
Accessories				
Horizontal polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Horizontal polarisation with tilt adj.		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Vertical polarisation		(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)	(Ø 42) included - PVZ-60 210065 (Ø 60)
Vertical polarisation with tilt adj.		PVZ-60 (210065)	PVZ-60 (210065)	PVZ-60 (210065)
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



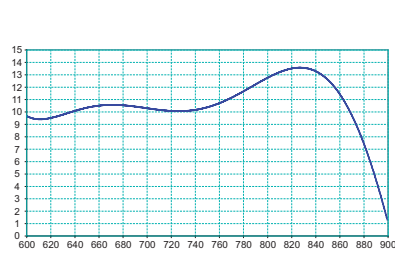
10BL45F

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)



10BL4F

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



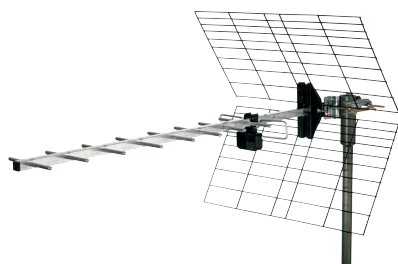
10BL5F

UHF

TAU GRID Serie

IV, V or UHF band Yagi aerial complete with F connector and grid reflectors.

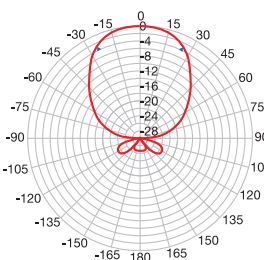
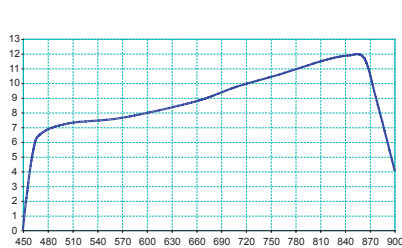
Particular mechanical strength thanks to 8mm extruded aluminium tubes



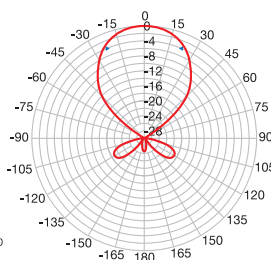
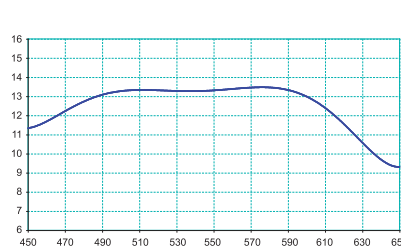
TAU11/45

		TAU11/45	TAU11/4	TAU11/5
Code		213101	213096	213097
Elements	No.	8	8	8
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12	13.5	12
Front-to-back ratio	dB	28	31	30
Return loss	dB	-16	-20	-17
Beamwidth (-3dB)	°	±23	±24	±23
Wind load at 120Km/h (720N/m ²)	Kg (N)	3.2 (31.39)	3.7 (36.29)	3.2 (31.39)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	97 x 50	115 x 50	87 x 50
Multiple packaging quantity	Pcs	10	10	10
Unit weight	Kg	1.28	1.30	1.18
Total weight with packaging	Kg	14.8	15.0	13.8
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



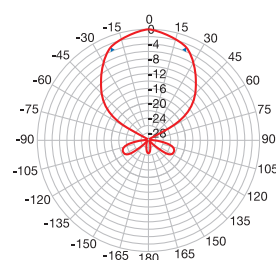
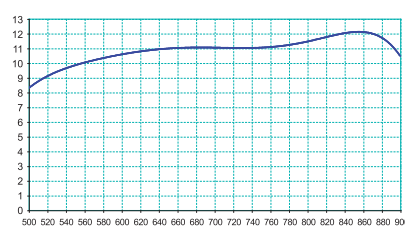
Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)



TAU11/45

TAU11/4

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



TAU11/5

UHF

TAU TUBE Serie

IV, V or UHF band Yagi aerial complete with F connector and tube reflectors.

Particular mechanical strength thanks to 8mm extruded aluminium tubes

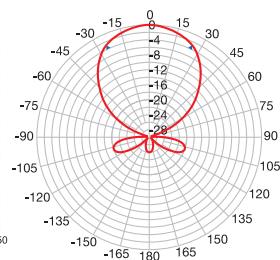
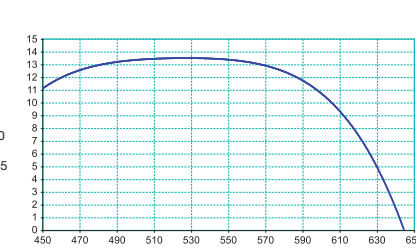
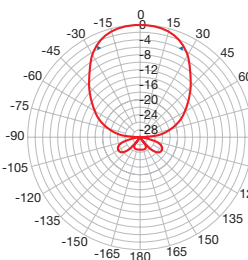
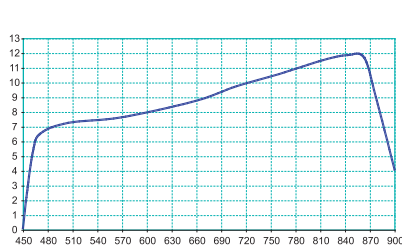


TAU15/45

		TAU15/45	TAU15/4	TAU15/5
Code		213100	213094	213095
Elements	No.	8	8	8
Bands		UHF	4	5
Channels		E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-606	606-862
Gain	dBi	12	13.5	11
Front-to-back ratio	dB	24	24	28
Return loss	dB	-14	-20	-16
Beamwidth (-3dB)	°	±25	±25	±26
Wind load at 120Km/h (720N/m ²)	Kg (N)	2.8 (27.46)	3.3 (32.37)	2.8 (27.46)
Connector	Type	F	F	F
Impedance	Ohm	75	75	75
Max mast diameter Ø	mm	60	60	60
Dimensions	cm	98 x 42	115 x 42	87 x 42
Multiple packaging quantity	Pcs	10	10	10
Unit weight	Kg	1.00	1.06	0.96
Total weight with packaging	Kg	12.0	12.6	11.6
Accessories				
Horizontal polarisation		Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included
Vertical polarisation		Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included
Auxiliary boom		N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)

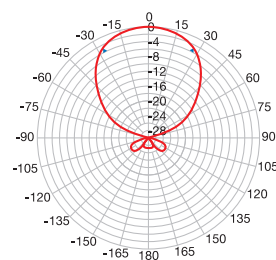
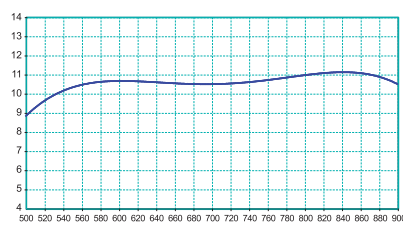
Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@600MHz)



TAU15/45

TAU15/4

Gain (x: frequency MHz, y: ISO dBi gain) and Pattern (@862MHz)



TAU15/5

UHF

OMEGA Serie

UHF band biconical aerial complete with F connector and grid reflectors.

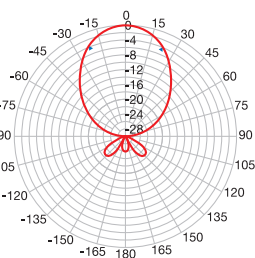
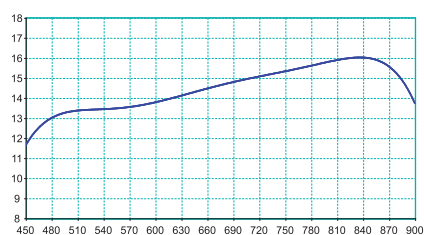
Particular mechanical strength thanks to 8mm extruded aluminium tubes



OMEGA8

OMEGA8		
Code		213022
Elements	No.	8
Bands		UHF
Channels		E21-E69
Freq. band	MHz	470-862
Gain	dBi	16
Front-to-back ratio	dB	32
Return loss	dB	-18
Beamwidth (-3dB)	°	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	5.5 (53.95)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	107 x 58
Multiple packaging quantity	Pcs	2
Unit weight	Kg	1.78
Total weight with packaging	Kg	3.6
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		CA2 (219602)

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



OMEGA8

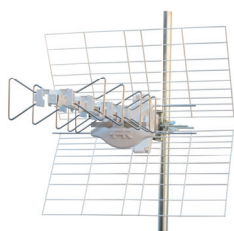


UHF

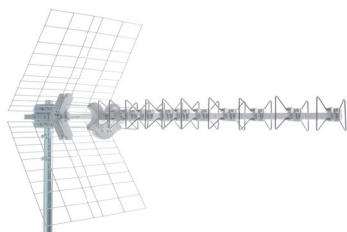
BLU Serie

UHF band biconical aerial complete with F connector and grid reflectors.

The BLU series can be mounted on a pole **Tools less mounting** BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **wingnut**.



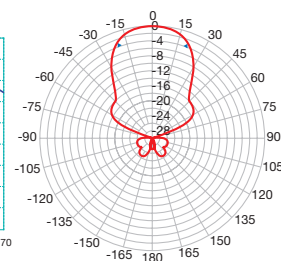
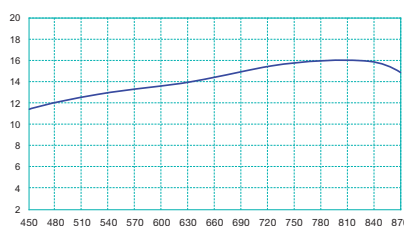
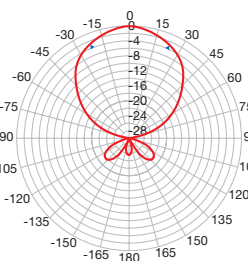
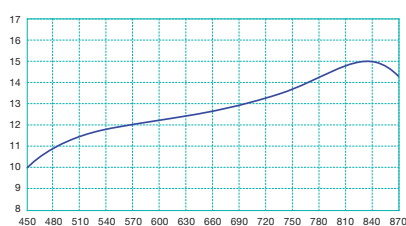
BLU5HD



BLU10HD

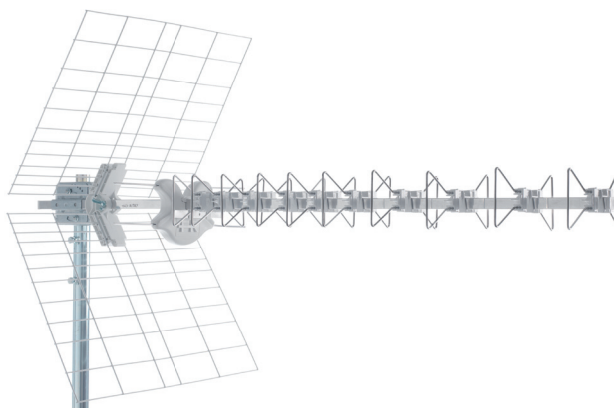
		BLU5HD	BLU10HD	BLU 10B4	BLU 10B5
Code		217901	217902	217903	217904
Elements	No.	5	10	10	10
Bands		UHF	UHF	4	5
Channels		E21-E69	E21-E69	E21-E37	E38-E69
Freq. band	MHz	470-862	470-862	470-606	606-862
Gain	dBi	15	16	13	16
Front-to-back ratio	dB	30	30	27	28
Return loss	dB	-16	-16	-20	-22
Beamwidth (-3dB)	°	±25	±22	±22	±22
Wind load at 120Km/h (720N/m2)	Kg (N)	5.7 (55.86)	7.2 (70.56)	7.2 (70.56)	7.2 (70.56)
Connector	Type	F	F	F	F
Impedance	Ohm	75	75	75	75
Max mast diameter Ø	mm	60	60	60	60
Dimensions	cm	84 x 50	119 x 50	122 x 50	119 x 50
Multiple packaging quantity	Pcs	10	10	10	10
Unit weight	Kg	1.72	2.27	2.52	2.28
Total weight with packaging	Kg	17.2	22.7	25.2	22.8
Accessories					
Horizontal polarisation		Included	Included	Included	Included
Horizontal polarisation with tilt adjustment		Included	Included	Included	Included
Vertical polarisation		Included	Included	Included	Included
Vertical polarisation with tilt adjustment		Included	Included	Included	Included
Auxiliary boom		N/A	N/A	N/A	N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



BLU5HD

BLU10HD



UHF

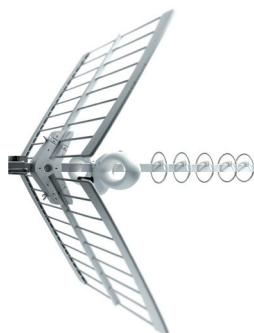
SIGMA Series

UHF band Loop Yagi aerial complete with F connector.

Tool less mounting BLU series, thanks to premounted elements, quick coupling radiator and reflectors and mast bracket with zenith adjustment and **large wingnut**.

High gain, excellent directivity and almost total absence of side lobes.

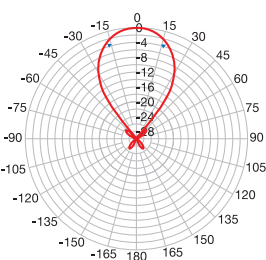
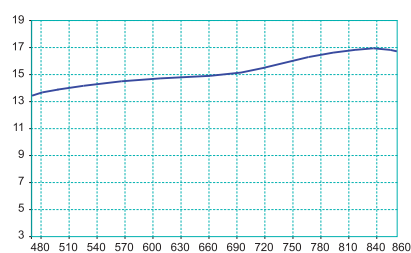
Exclusive design patented by Fracarro.



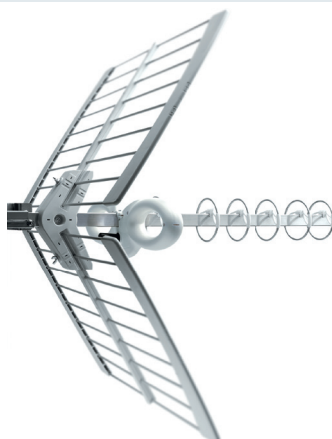
SIGMA 6HD

SIGMA 6HD		
Code		213201
Elements	No.	6
Bands		UHF
Channels		E21-E69
Freq. band	MHz	470-862
Gain	dBi	17
Front-to-back ratio	dB	32
Return loss	dB	-18
Beamwidth (-3dB)	°	±18
Wind load at 120Km/h (720N/m2)	Kg (N)	23 (225.4)
Connector	Type	F
Impedance	Ohm	75
Max mast diameter Ø	mm	60
Dimensions	cm	92 x 63
Multiple packaging quantity	Pcs	4
Unit weight	Kg	2.30
Total weight with packaging	Kg	12.0
Accessories		
Horizontal polarisation		Included
Horizontal polarisation with tilt adjustment		Included
Vertical polarisation		Included
Vertical polarisation with tilt adjustment		Included
Auxiliary boom		N/A

Gain (x: frequency MHz, y: ISO dBi gain) and **Pattern** (@862MHz)



SIGMA 6HD



MAST

TELESCOPIC MASTS

Telescopic masts with cap.
Hot-dipped zinc coating.



TEL1.5/4

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
TEL1.5/4	287243	1.5	2+2=4	25+30	5
TEL2/4	287241	2	2+2=4	28+35	3
TEL2/6	287242	2	2x3=6	28+35+42	2

MASTS WITHOUT NUTS

Masts without nuts with cap.
Hot-dipped zinc coating.



PaloSB2 1.5/25

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
PaloSB2 1.5/25	287244	1.5	2	25	10
PaloSB2 2/28	287245	2	2	28	5
PaloSB3 2/28	287246	2	3	28	5

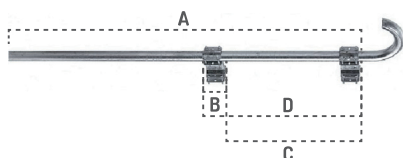


PaloCB2 1.5/30

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
PaloCB2 1.5/30	287247	1.5	2	30	5
PaloCB2 1.5/35	287248	1.5	2	35	5
PaloCB2 1.5/40	287249	1.5	2	40	5
PaloCB2 2/35	287250	2	2	35	5
PaloCB2 2/42	287251	2	2	42	5
PaloCB2 2/50	287252	2	2	50	3
PaloCB3 2/35	287253	2	3	35	3
PaloCB3 2/42	287254	2	3	42	3
PaloCB3 2/50	287255	2	3	50	2
PaloCB2 3/60	287256	3	2	60	2
PaloCB3 3/60	287257	3	3	60	1

ELBOW MASTS

Elbow shaped masts with removable elbow.
Hot-dipped zinc coating



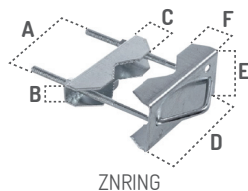
Pal curva40+ATT

Item	Code	Thickness mm	length m	Diameter mm	Packing Pcs
Pal curva40+ATT	287258	2	2	40	1
Pal curva50+ATT	287259	2	2	50	1

AERIAL ACCESSORIES

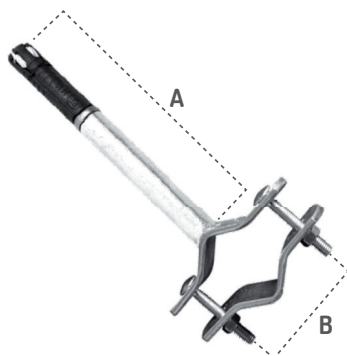
RAILING MASTS

Mast bracket for railing mast, Electrolytic zinc coating.



ZNRING

Item	Code	Features	Packing Pcs
ZNRING	287271	Mast bracket for railing mast A: 80 mm, B: 45 mm, C: 15 mm, D: 80 mm, E: 30 mm, F: 25 mm Reverse toothed stirrup 2,3 mm tickness M6 Clevis Ø 30÷55 mm Masts	70



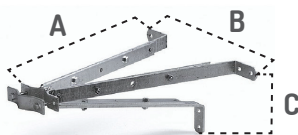
ZNESPTU10

Item	Code	Features	Packing Pcs
ZNESPTU10	287260	A: Total length 10cm B: Holes spacing 63 mm Clevis: tape 30x3 mm, nuts: M6x45 mm MAST clampi Ø 25÷45 mm, Tube Ø 18x1,5 mm.	50
ZNESPTU15	287261	A: Bracket total length 15 cm B: Holes spacing 63 mm Growing screw M10 (Ø 18x 60 mm)	50
ZNESPTU20	287262	A: Total length 20cm B: Holes spacing 63 mm Clevis: tape 30x3 mm, nuts: M6x45 mm MAST clampi Ø 25÷45 mm, Tube Ø 18x1,5 mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT010	287268	A: Total length 10cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm, cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT015	287269	A: Bracket total length 15 cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm, cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50
ZNESPT020	287270	A: Total length 20cm B: Holes spacing 95 mm Clevis: tape 30x4 mm, nuts: M8x60 mm MAST clampi Ø 30÷60 mm, cylinder Ø 18mm, growing screws M10 (Ø 18x 60 mm)	50

TRIPOD

Mast mount tripod

- Adjustable
- Hot-dipped zinc coating



ZN3PREG

Item	Code	Features	Packing Pcs
ZN3PREG	287272	A: Adjustable from 26 to 42 cm B: min 35 cm - max 43 cm C: min 23 cm - max 33 cm Chassis: flat 30x5mm - 3 connection holes Ø 11 mm Toothed brackets 2,5mm tickness Screws M8x120 mm QST Mast connection Ø 30÷55mm	12

WALLMOUNT BRACKET

Wallmount brackets

- Hot-dipped zinc coating



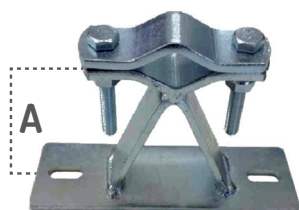
ZNPMEMILIA

Item	Code	Features	Packing Pcs
ZNPMEMILIA	287273	Plate: 250x70x5 mm - 2 mounting holes 20x14 mm Clevis: 40x8 mm - Holes spacing 140 mm Screws : M10x90 mm for masts Ø 40÷90 mm Hot-dipped zinc coating	12
ZNPMECONO	287274	Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	40

AERIAL ACCESSORIES

REINFORCED BRACKETS

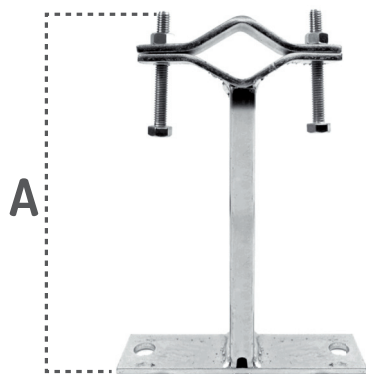
Hot-dipped zinc coating reinforced brackets
Reinforced brackets



ZNRINF

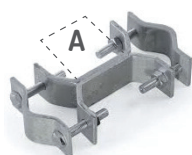
CHEAP BRACKET

Hot-dipped zinc coating cheap brackets



ZNECON05

CLEVIS



CAV8DIST



CAV8UNIVERSAL



CAV8

Item	Code	Features	Packing Pcs
ZNRINF	287275	Plate: 200x70x5 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	15
ZNRINF5	287276	A: 5 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	12
ZNRINF10	287277	A: 10 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	12
ZNRINF20	287278	A: 20 cm Chassis plate: 35x6 mm Plate: 200x70x5 mm - 2 mounting holes 20x11 mm Clevis: 35x6 mm - Holes spacing 100 mm Screws: M10x60 mm for masts Ø 30÷60 mm	10

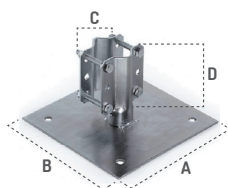
Item	Code	Features	Packing Pcs
ZNECON05	287331	A: 5 cm Chassis plate: 40x8 mm Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm Hot-dipped zinc coating	25
ZNECON010	287279	A: 10 cm Chassis plate: 40x8 mm Plate: 170x40x4 mm - 2 mounting holes 15x10 mm Clevis: 40x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm Hot-dipped zinc coating	25
ZNTELE20	287332	A: Adjustable from 20 to 33 cm Plate: 110x50x4 mm - 2 mounting holes 15x10 mm Inner tube Ø 20x20x1,5 mm Outer tube Ø 25x25x1,5 mm Clevis: 30x4 mm - Holes spacing 95 mm Screws: M8x60 mm QST for masts Ø 25÷60 mm electrolytic coating	25

Item	Code	Features	Packing Pcs
CAV8DIST	287280	A: 60 mm - Plate 35x6 mm Clevis: plate 35x6 mm - Holes spacing 100 mm For masts Ø 30÷60 mm •Screws: M10x60 mm	15
CAV8UNIVERSAL	287281	Plate: 90x90x2,5 mm For masts Ø 25÷60 mm Screws: M8x60 mm	25
CAV8	287282	Tape: 30x4 mm Screws: M6x40 mm For masts Ø 25÷60 mm	60

AERIAL ACCESSORIES

PLATE

Plate for terraces and floors, fire-galvanized.



Slab, terrace plate Hot-dipped zinc coating

Item	Code	Features	Packing Pcs
Slab, terrace plate Hot-dipped zinc coating	287283	A: 200 mm B: 200 mm sp. 3 mm 4 mounting holes Ø 14 mm C: 90 mm D: 90 mm sp. 2.5 mm Screws M8x50 mm for masts Ø 30÷50 mm	20

FRANCE BRACKETS

Chimney brackets (French style) Hot-dipped zinc coating



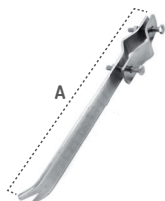
ZNFRCAMNEW28

Item	Code	Features	Packing Pcs
ZNFRCAMNEW28	287285	28 cm Protrusion 160mm For masts Ø 25÷50 mm	20
FRCAM32	287284	32 cm Protrusion 160mm For masts Ø 25÷50 mm	12

WALLMOUNT BRACKET

U shape brackets

- Wall mount
- Reinforced brackets
- electrolytic coating



ZNMURO

Item	Code	Features	Packing Pcs
ZNMURO	287288	A: 30cm - U Shape 30x15x4mm Clevis: tape 30x4mm - Holes spacing 95mm Screws: M8x60mm QST For masts Ø 30÷60 mm	25

CHIMNEY BRACKETS

Chimney brackets

- electrolytic coating



ZACAMINO

Item	Code	Features	Packing Pcs
ZACAMINO	287287	A: 14 cm B: 27 cm Tape: 30x3 mm Screws: M6x45 mm QST - Holes M6 Clevis: 30x3mm - Holes spacing 63 mm For masts Ø 25÷45 mm	30

AERIAL ACCESSORIES

BRACKET ACCESSORIES

Accessories and brackets



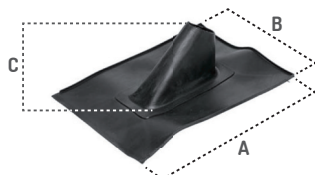
RALLATRIS



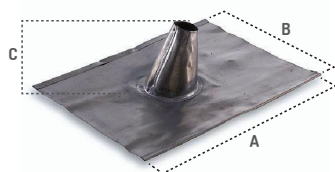
TENDIFILO



CONTROPIASTRA



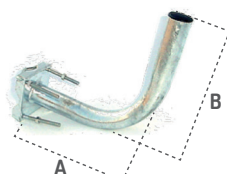
TEGOLAPVC



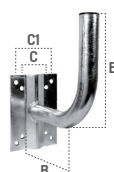
TEGOLAPIOMBO



CAPPUCCIOPVC



SUPUNIVERSAL



SUPMUR046

Item	Code	Features	Packing Pcs
RALLATRIS	287289	Tape 20x3 mm Screws M6x45 mm QST For masts Ø 25÷45 mm electrolytic coating	100
TENDIFILO	287290	Rope Ø max 5 mm electrolytic coating	100
CONTROPIASTRA	287291	Plate: 250x70x5 mm 6 holes Ø 14 mm ZPNEMILIA Reverse bracket Hot-dipped zinc coating	1
NASTROZNFR	287263	metal taper for Chimney (France style) 25mt reel - tape 40x0.5mm	5
TEGOLAPVC	287292	PVC Tile A: 410 mm B: 300 mm C: 130 mm For mast up to Ø 60 mm	30
TEGOLAPIOMBO	287293	A: 500 mm B: 400 mm C: 170 mm Thickness mm 1 - Lead quality 99,9% PVC cap for masts Ø 40÷80 mm	5
CAPPUCCIOPVC	287294	A: 180 mm For masts Ø 35÷60 mm Soft PVC	200
SUPUNIVERSAL	287264	Tube Ø 40x1,4 mm A: 260 mm B: 250 mm Plate: 100x100x2,5 mm Clevis and nuts included Vertical and horizontal clamp For masts Ø 25÷76 mm Hot-dipped zinc coating	15
SUPMUR026	287265	Wall mount and mast bracket Tube Ø 40x1,5 mm A: 240 mm B: 230 mm Plate 200x135x4mm Clevis not included 4 mounting holes Ø 10 mm C: 80 mm (holes spacing) 4 external mounting holes Ø 12 mm C1: 95 mm Hot-dipped zinc coating	20
SUPMUR046	287266	Wall mount and mast bracket Tube Ø 40x1,5 mm A: 440 mm B: 230 mm Plate 200x135x4mm (clevis not included) 4 mounting holes Ø 10 mm C: 80 mm (holes spacing) 4 external mounting holes Ø 12 mm C1: 95 mm (holes spacing) Hot-dipped zinc coating	20
SUPCURV0180G	287267	Bended mast bracket Tube Ø 40x1,5 mm A: 400 mm B: 240 mm C: 350mm Hot-dipped zinc coating	8
PVP	210002	Mast clamp for panel aerals Ø max. 60mm	20
PV10	210011	Vertical mount accessories up to Ø max. 60mm masts. Hot-dipped zinc coating	30
CA2	219602	Auxiliary booms	-
BA914	280674	Base for dish mount (for dishes from Ø da 90 to 140mm) Mast Ø= 76mm	1
STM1	281801	Wall bracket Mast Ø = 40mm Thickness 1,2mm	1
ZPL-R650	287179	Guyed extendable mast Adjustable protrusion from 450 to 650mm	10
ZPL-R450	287180	Guyed extendable mast Adjustable protrusion from 300 to 450mm	12
AN1	293301	Corner saving protection Rope fixings	100
BA6	293400	Plate for telescopic masts Ø 25 - 48mm masts suitable.	20

DISHES

PENTA Serie

Aluminium and steel offset dishes with 68 and 85cm equivalent diameter



			DIGIT	PENTA85
Operating frequencies		GHz	10.7 - 12.75	10.7 - 12.75
Dimensions	Ø	mm	624 x 624	775 x 775
Offset angle		°	22.3	22.1
Efficiency			x70%	x70%
Gain	10.95 GHz	dB	36.5	39
Cross polarization		dB	x37	x38
First side lobe		dB	x-32	x-34
Noise temperature	Elevation 30°	K°	40	40
F/D equivalent ratio			0.7	0.7
Lobe amplitude	3dB		3	2.2
LNB holder		mm	23-28; 40; 60	23-28; 40; 60
Elevation angle			60° Maximum tilt	60° Maximum tilt
Mast mounting		mm	35-80	35-80
Dish material			Aluminium	Aluminium
LNB holder material			Steel - Aluminium/ Zinc treatment	Steel - Aluminium/ Zinc treatment
Wind resistance	150 Km/h	Kg	53	81

Single packaging

equivalent ø	Item	Code	Material	Color	Support 6° dual feed	Mounting kit
68	DIGIT	211101	Aluminium	White	DFPDIGIT cod. 211003	ZNCDGT included
68	DIGIT-G	211102	Aluminium	Grey	DFPDIGIT cod. 211003	ZNCDGT included
68	DIGIT-R	211103	Aluminium	Red	DFPDIGIT cod. 211003	ZNCDGT included
68	DIGIT-A	211104	Steel	White	DFPDIGIT cod. 211003	ZNCDGT included
68	DIGIT-GA	211105	Steel	Grey	DFPDIGIT cod. 211003	ZNCDGT included
68	DIGIT-RA	211106	Steel	Red	DFPDIGIT cod. 211003	ZNCDGT included
85	PENTA85-A	211205	Steel	White	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	PENTA85G-A	211206	Steel	Grey	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	PENTA85R-A	211207	Steel	Red	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	PENTA85	211201	Aluminium	White	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	PENTA85G	211203	Aluminium	Grey	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included
85	PENTA85R	211204	Aluminium	Red	DFP85R cod. 211002 (adjustable rotation) DFP85 cod. 211001	ZNC85 included

DISHES

60-85 cm OFFSET DISHES Serie

Aluminium and steel offset dishes with 60, 80 and 85cm diameter



P080SCX50

			R060AP	R060A	R080AP	R080SC	R085AP
Dimensions	Ø	mm	630 x 590	632 x 583	632 x 846	810 x 750	910 x 837
Offset angle		°	23	24	23	22.75	21
F/D equivalent ratio			0.65	0.66	0.66	0.66	0.66
Elevation angle			20/55	4/55	0/80	0/50	1/60
Mast mounting		mm	25-50	20-50	30-60	30-60	30-60
Dish material			Steel	Steel	Steel	Steel	Aluminium
Color			White	White	White	White grey	Grey
Efficiency	%		x70%	x69%	x75%	x75%	x70%
Gain	10.7 GHz	dB	34.4	34.7	37.0	37.6	37.4
	11.7 GHz	dB	35.0	35.5	37.7	38.2	38.2
	12.7 GHz	dB	36.4	36.2	38.5	38.6	38.9

Single packaging

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
80	P80APN	211316	R080SC	Steel	-	-	1
85	R085AS	287411	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G cod. 289829 included	1

Programmation web interface

equivalent ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
60	R060AX10	280610	R060A	Steel	-	ZN060AC code 289279	10
60	R060APX400	287186	R060AP	Steel	-	ZN060AP code 287187	400
80	P080SCX50	287402	R080SC	Steel	DF80SC code 287422e	Z080SC cod. 287404 included	50
80	R080APX50	289479	R080AP	Steel	DFAN code 289487	ZN080APN code 289480	50
80	R080APX200	289283	R080AP	Steel	DFAN code 289487	ZN080APN code 289480	200
85	R085AS	287411	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G cod. 289829 included	1
85	R085APX5G	289828	R085AP	Aluminium	DF0100C code 289294	ZN085PX5G code 289829	5

DISHES

100-150 cm OFFSET DISHES Serie

Aluminium and steel offset dishes with 100 and 150cm diameter



R0100AP

			R0100C	RO-100AC	R0100AP	R0120N	R0125AP	R0150
Dimensions	Ø	mm	970 x 1040	970 x 1040	1032 x 952	1164 x 1240	1345 x 1240	1614 x 1488
Offset angle		°	21	21	23	23	23	21.3
F/D equivalent ratio			0.66	0.66	0.66	0.66	0.66	0.66
Elevation angle			0/80	0/80	0/90	20/50	0/90	20/90
Mast mounting		mm	30-90	30-90	35-60	55-100	40-60	55-100
Dish material			Aluminium	Steel	Aluminium	Aluminium	Aluminium	Aluminium
Color			White grey	White	Grey	White	Grey	White
Efficiency	%		x70%	x70%	x72%	x70%	x74%	x70%
Gain	10.7 GHz	dB	39.7	39.7	39.4	40.5	41.0	42.6
	11.7 GHz	dB	40.2	40.2	40.0	41.4	41.6	43.4
	12.7 GHz	dB	40.5	40.5	40.6	42.3	42.4	44.2

Single packaging

equivalent Ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
100	PT100C	289291	R0100C	Aluminium	DF0100C code 289294	ZN0100C code 289285 included	1
150	R0150	289139	R0150	Aluminium	DF0120N code 289199	AZ0150 code 289140	1
100	PT100AC	289293	R0100AC	Steel	DF0100C code 289294	ZN0100C code 289285 included	1
120	R0120N	289197	R0120N	Aluminium	-	AZ0120N code 289196 AZ0120N-PP code 289949	1

Multiple packaging

equivalent Ø	Item	Code	Dish	Material	Support 6° dual feed	Mounting kit	Packing pcs.
100	R0100ACX6	289299	R0100AC	Steel	DF0100C code 289294	ZN0100C code 289285	6
100	R0100APX5G	289830	R0100AP	Aluminium	DFAN code 289487	ZN0100PX5 code 289831	5
125	R0125APX3G	289832	R0125AP	Aluminium	-	ZN0125PX3 code 289833	3

Wind resistance is referred to dish diameter @120Km/h (kg)

Equivalent Ø cm	60	65	75	80	85	90	100	120	150
Wind resistance	34	42	47	55.2	70	80	91	145	235

LNB

UNIVERSAL LNB Serie

UX LNB Serie guarantees an optimal signal reception and they fulfil every system requirements: from single distribution to complex multiuser or hospitality plants



UX-S LTE

UX-QT LTE

Item	Code	Description	Outputs	Gain	Consumption	Lte protection
UX-S LTE	287337	Single LNB with 1 universal output and LTE shielding, Sky Italy approved	1	60	110	-54
UX-TW LTE	287338	Twin LNB with 2 universal outputs and LTE shielding	2	60	150	-54
UX-QD LTE	287339	Quad LNB with 4 universal outputs and LTE shielding, Sky Italy approved	4	60	190	-54
UX-OCTO LTE	287340	Octo LNB with 8 universal outputs and LTE shielding	8	55	200	-54
UX-QT LTE	287302	Quattro LNB with 4 separate polarities outputs H/V and LTE shielding, Sky Italy approved	4	57	160	60
UX-MBS6	287139	6° monoblock LNB with 1 universal output	1	55	110	-
UX-MBTW6	287140	6° monoblock LNB with 2 universal outputs	2	55	190	-
UX-MBQD6	287141	6° monoblock LNB with 4 universal outputs	4	55	190	-

LNB

SCD2 (dCSS) LNB Serie

#b#SCD2 (dCSS) LNB#b# with 1 output which is able to serve up to 4 SCR SAT receivers and, at the same time, 12 frequencies used by **new SCD2 (dCSS) decoders**; both functionalities using only one cable. It can be used to increase the number of TV services.



SCD2-16LNB

SCD2-16LNB		
Code		287421
Input frequency	GHz	10.7-11.7 / 11.7-12.75
Outputs		1
Users		4 SCR, 12 SCD2 (dCSS)
Output frequency	MHz	1210, 1420, 1680, 2040 (comply with EN50494 standard) 985, 1050, 1115, 1275 1340, 1485, 1550, 1615 1745, 1810, 1875, 1840 (comply with EN50607 standard)
Gain	dB	65
Output level for each transponder	dBμV	84
Supply voltage	V	11.5 - 19
Consumption	mA	360

Installation example



SATELLITE KIT

KIT SAT Serie

Satellite KIT with: dish, mounting kit and LNB



KIT P80APK

Item	Code	Description
KIT 80APK	211308	Composed by: 1 R080SC + 1 Z080SC + 1 UX-S LTE
KIT P85AK	211220	Composed by: 1 PENTA85-A + 1 UX-S LTE
KIT SAT21601	211311	Composed by: 1 R060AP + 1 ZN060AP + 1 UX-S LTE
KIT 9/13 R080	211319	Composed by: 1 R080 + 1 ZN080 + 1 DFP 9-13 + 1 MB3UZ

DISH ACCESSORIES

DiSEqC Serie

Line switch controlled with DiSEqC commands on coaxial cable, controlled by SAT receivers through DiSEqC commands.

- They allow to switch through 2 or 4 LNBs using digital commands generated by SAT receivers on coaxial cable (for example: Hotbird 13°E and Astra 19,2°E)
- Included plastic cover for external use

		DSQ21J	DSQ41J
Code		289588	289589
Bands		950 - 2300	950 - 2300
Inputs	No.	2	4
Outputs	No.	1	1
Through loss	dB	4	4
DiSEqC		2.0	2.0
Isolation	dB	35	35
Quantity	Pcs.	1	1



DSQ21J

DSQ41J

DISH ACCESSORIES

AMPLIFIER Serie

SAT line amplifier



AS20

		AS20
Code		284013
Bands	MHz	950 - 2150
Gain	dB	12-17
Noise figure	dB	8
Operating voltage	V	13 - 18
Consumption	mA	40@13V
Impedance	Ohm	75
Connector		F female
Fixed output level	dBpV	105
Quantity	Pcs.	1
Dimensions	mm	1 x 1.5 x 70

Electronic Mast and indoor equipment

LTE FILTERS

LTE and FM Filters	51
--------------------	----

Couper and Mixers

MX Series	51
ESV Series	52
JSVU Series	52
MIX TV+SAT series	52

Mast amplifier

ES series	53
JS2RT Sereis	53
MAP EVO Series	54
MAP 12V series	55

Mast amplifier

Serie MAP 24V	56
Serie MAK	56

Line Amplifiers

AT Series	57
-----------	----

POWER SUPPLY UNIT

PSU and MINI POWER series	57
---------------------------	----

POWER SUPPLY UNIT

AM Series	58
-----------	----

Inddor Amplifier

AFI series	58
MINIBOOST Series	59

Indoor Modulator

Digital modulator Series	59
--------------------------	----

Indoor Modulator

Digital modulator Series	
Analog modulator Series	61
Analog modulator S Series	62

Channe precessor

Channel processor series	63
--------------------------	----

Multiband amplifier

J series	63
MBJ EVO Series	64
MBX Series	65

Amplificatori Di Testa Satellite

Serie AMP	66
-----------	----

Programmable headends

FRPRO EVO HD Sereis	67
---------------------	----

Programmable filtres

FIL Series	68
------------	----

Electronic Mast and indoor equipment

LTE FILTERS



LTE Filter 60

LTE and FM Filters

FM and LTE indoor/outdoor filters developed to **reduce the interferences coming from any eventual LTE (4G) and FM signals**. Available with cutoff frequencies as 790MHz or 694MHz.

- High selectivity filters for LTE or FM designed to limit the interferences coming from undesired signals
- Low insertion loss
- IP66 outdoor mounting
- Single input and output

Item	Code	IN	Bands (MHz)	Return loss (dB)	Insertion loss (dB)	Selectivity (dB)	Filtered band (MHz)	Pack. Pcs	Dimensions (mm)
LTE Filter 60	226709	1	47-790	<-10	1.5	30 (801MHz)	801 - 862	1	70 x 20 x 20
LTE Filter 59	226711	1	47-782	<-10	1.5	30 (791MHz)	791 - 862	1	70 x 20 x 20
LTE Filter 48	226715	1	47-694	<-10	1.5	30 (704MHz)	704 - 862	1	70 x 20 x 20
FM Filter	226714	1	108-862	<-12	1.5	30 (88-108MHz)	87 - 108	1	70 x 20 x 20
MX Filter 700	226716	1	DC-694	<-13	< 2	> 25	733 - 862	1	107 x 60 x 95

Coupler and Mixers



MX201

MX Series

Mixers and coupler with 2 or 3 inputs

- Metal chassis completely shielded
- 75 ohm impedances
- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Dimensions 95x60x105 mm.
- (*) special tuning

Item	Code	IN	IN 1	IN 2	IN 3	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Loss IN3 (dB)	Pack. Pcs
MX201	223201	2	VHF + DC	UHF	-	1	20	0.2	0.2	-	6
MX202	223202	2	VHF + UHF + DC	VHF + UHF (selectable DC)	-	1	10	4	4	-	1
MX203	223203	2	VHF + DC	UHF	-	2	10	3.5	3.5	-	1
MX205	223217	2	VHF + UHF	SAT + DC	-	1	15	0.5	1	-	1
MX206	223218	3	I + FM	III+DAB	UHF + DC	1	15	0.5	0.5	1	1
MX210	223222	3	VHF	IV	V + DC	1	15	0.5	1	1	1
MX210/..*	223223	3	VHF	IV	V + DC	1	15	0.5	1	1	1
MX211	223221	3	VHF	UHF	UHF + DC	1	15	0.5	4	4	1

Couper and Mixers



ESV45

ESV Series

2 or 3 inputs mast mixers, can be installed as demixers using the output as inputs.

- Mast strap up to 60mm
- 75 ohm impedances
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	IN 3	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Loss IN3 (dB)	Pack. Pcs
ESV45	226804	3	VHF	IV (21-35)	V (39-69) + DC	1	10	0.5	1	1	10
ESVUU	226806	3	VHF	UHF + DC	UHF	1	10	0.5	4	4	10
ESVU	226801	2	VHF	UHF + DC	-	1	10	1	1	-	10

Indoor mixers



JSVU3

JSVU Series

Indoor mixer VHF/UHF

- Die cast housing fully shielded
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Pack. Pcs
JSVU3	223109	2	VHF + S (40-446 MHz)	UHF (470-862)	1	10	1	1	20

Indoor mixers



MXST

MIX TV+SAT series

Indoor TV /SAT mixers; can be used also as demixer connecting the input to the "MIX". Due versions standard and High Isolation standard e ad alto isolamento tra gli ingressi.

- High isolation between inputs
- Working temperature from -10 to 55°C.

Item	Code	IN	IN 1	IN 2	Usc.	Return Loss (dB)	Loss IN1 (dB)	Loss IN2 (dB)	Pack. Pcs
MXST	226400	2	TV (47-862 MHz)	SAT + DC (950-2150MHz)	1	15	0.5	0.5	20
PAS0303011	PAS0303011	2	TV (47-862 MHz)	SAT + DC (950-2150MHz)	1	10	0.5	0.5	1

Electronic Mast and indoor equipment

Mast amplifier



ES1/RVU

ES series

Mast amplifier for signals coming from different aerials. The amplifier are remotely feeded by 12Vdc un the output connector.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Dimensions: 74x36x58mm.

Item	Code	IN	Frequency (MHz)	Gain (dB)	Out. Lev. (dBμV)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
ES1/Q	226905	1	174 - 862	12	115	4	28	10
ES1/RVU	226909	2	470 - 862	12	115	4	27	10
ES2/Q	226913	1	174 - 862	22	115	4	50	10
ES2RT	226912	1	47 - 862	23	115	4	50	10
ES2/RU	226917	1	470 - 862	25	115	4	55	10

Mast amplifier



JS2RT

JS2RT Sereis

Fully shielded die cast housing mast amplifier. The amplifier are remotely feeded by 12Vdc un the output connector.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Dimensions:115x55x103mm

Item	Code	IN	Input bands	Frequency MHz	Gain dB	Out. Lev. dBμV	Adj. dB	Noise figure dB	Current cons. (mA)	Pack. Pcs
JS2RT	223101	1	III+DAB + UHF	-	12	115	-	4	60	10

Mast amplifier



MAP4r3+U LTE+

MAP EVO Series

Fully shielded die cast housing mast amplifier to mix and amplify signals coming from different aerials. Die cast housing with metal frame cover to prevent any interference.

"F" female connector and new plastic outdoor cover for a quick and easy installation.

Separate VHF/UHF amplification with selectable remote feeding on all UHF inputs.

Power supply presence LED

Fully RED compliant

- Clipper technology inside
- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply voltage 12 or 24Vdc
- Available in LTE 700 or 790MHz



Item	Code	IN	Bands	Out. Lev. (dBμV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)
MAP2r3+U LTE	223703	1	III+DAB + UHF	112, 116	20, 25	15, 15	5, 4	80@12Vdc
MAP4r3+U LTE+ •	223701	1	III+DAB + UHF	112, 116	22, 42	15, 15	6, 4	125@12Vdc
MAP4rU LTE+ •	223702	1	UHF	112, 116	42	15	3	100@12Vdc
MAP4rU LTE700+ •	223704	1	UHF	112, 116	42	15	3	100@24Vdc
MAP3r3U LTE	223707	2	III+DAB , UHF	112, 116	21, 28	15, 15	5, 4	80@12Vdc
MAP3r3+UU LTE	223708	2	III+DAB + UHF, UHF	112, 116	28, 28	15, 15	7, 7	60@12Vdc
MAP3rFM+3U 700	223711	2	FM+III+DAB , UHF	112, 116	22, 28	15, 15	5, 4	85@24Vdc
MAP4r3U LTE+ •	223706	2	III+DAB , UHF	112, 116	22, 42	15, 15	5, 3	125@12Vdc
MAP3r3UU LTE	223709	3	III+DAB , UHF , UHF	112, 116	21, 28, 28	15, 15, 15	6, 7	105@12Vdc
MAP4r3UU LTE+ •	223710	3	III+DAB , UHF , UHF	112, 116	22, 40, 40	15, 15, 15	5, 7	125@12Vdc
MAP3r3UU 2LTE	223712	3	III+DAB , UHF , UHF	112, 116	26, 28, 28	15, 15, 15	5, 7	140@12Vdc
MAP3rFM+3UU 2LTE	223713	3	FM+III+DAB , UHF, UHF	112, 116	26, 28, 28	15, 15, 15	5, 7	140@12Vdc
MAP2r345U LTE	223714	4	III+DAB , IV , V , UHF	112, 116	21, 25, 25, 25	15, 15, 15, 15	5, 7	80@12Vdc
MAP2r345U LTE/.	223715	4	III+DAB , IV , V , UHF	112, 116	21, 25, 25, 25	15, 15, 15, 15	5, 7	80@12Vdc
MAP2rFM3USAT	223716	4 DiSeqC passthrough	FM , III+DAB , UHF, SAT	112, 116	22, 20, 25, -1	15, 15, 15, -	6, 6, 6, -	80

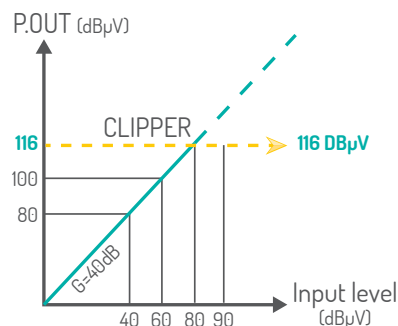
• Funzionalità Clipper

Funzionalità CLIPPER •

Nei modelli ad alto guadagno la funzionalità Clipper limita automaticamente il guadagno del dispositivo per garantire il massimo livello di uscita RF dichiarato e contemporaneamente ridurre al minimo l'intermodulazione (RED Compliant).

La normativa

Tutti i modelli della gamma MAP EVO sono stati accuratamente dimensionati per garantire il pieno rispetto degli obblighi normativi riguardanti lo Spettro Radio, la Compatibilità Elettromagnetica e la Sicurezza enunciati nelle direttive. 2014/53/UE, 2011/65/UE. RED compliant.



Electronic Mast and indoor equipment

Mast amplifier



MAP106



MAP540LTE

MAP 12V series

No serve

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply 12 V

Item	Code	IN	Bands	Out. Lev. (dBpV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAP106	223122	1	VHF + UHF	115	34, 34	15, 15	5, 5	75	10
MAP113LTE	223513	1	UHF	115	30	15	8	80	10
MAP115LTE	223523	1	III+DAB + UHF	115	30, 30	15, 15	5, 5	75	10
MAP204LTE	223519	2	III+DAB , UHF	115	25, 24	15, 15	5, 5	65	10
MAP206LTE	223520	2	III+DAB , UHF	115	35, 35	15, 15	5, 5	75	10
MAP207LTE	223524	2	III+DAB + UHF , UHF	115	30, 30	15, 15	8, 8	70	10
MAP208	223161	2	III+DAB , UHF	115	34, 35	15, 15	4, 3	80	10
MAP210/31-33	223127	2	VHF + IV , V	112	-2, 11	-	- , 5	40	10
MAP303/31-33	223128	3	VHF , IV , V	115	-2, 12	-	- , 5	40	10
MAP313LTE	223511	3	III+DAB , UHF , UHF	115	24, 30, 30	15, 15, 15	5, 8	80	5
MAP315LTE	223522	3	III+DAB , UHF , UHF	115	30, 38, 38	15, 15, 15	5, 8	95	5
MAP400	223141	4	VHF , VHF , UHF , UHF	112, 115	-4, 21, 19, 19	- , 15, 15, 15	- , 5, 8	60	5
MAP401	223195	4 DISEqC passthrough	FM , III+DAB , UHF , SAT	112, 115	21, 19, 30, -2	15, 15, 15, -	5, 6, -	85	5
MAP413LTE	223510	4 (2 outputs)	FM , III+DAB , UHF , UHF	115	24, 24, 30, 30	15, 15, 15, 15	5, 8	75	10
MAP540LTE	223508	4	III+DAB , IV , V , UHF	115	15, 10, 10, 10	-	4, 8	40	5
MAP540LTE/..	223514	4	III+DAB , IV , V , UHF	115	15, 10, 10, 10	-	4, 8	40	5
MAP541LTE	223509	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5
MAP541LTE/..	223515	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5
MAP541LTE/40-42	223525	4	III+DAB , IV , V , UHF	115	24, 19, 20, 20	15, 15, 15, 15	4, 8	60	5

Mast amplifier



MAP106

Serie MAP 24V

MAP mast amplifiers mix and amplify signals coming from different aerials. Metal frame chassis fullshielded with F connectors. **Quick and easy installation.** Remote feeding on each input.

- Mast strap up to 60mm
- Working temperature from -10 to 55°C.
- Gain adj 15dB
- Supply 24Vdc

Item	Code	IN	Bands	Out. Lev. (dBμV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAP110	223196	1	III+DAB + UHF	115	13	-	2,5, 2,5	30	10
MAP111	223506	1	UHF	115	13	-	2,5	30	10
MAP116I	223507	1	UHF	115	27	15	2,5	60	10
MAP102	223121	1	UHF	115	33	15	6	70	10
MAP113LTE24	223516	1	UHF	115	30	15	5	70	10
MAP113LTE700	223527	1	UHF	115	30	15	5	70	10
MAP201LTE	223512	2	VHF , UHF	115	24, 34	15, 15	5, 5	80	10
MAP201LTE700	223526	2	VHF , UHF	115	24, 34	15, 15	5, 5	80	10
MAP300LTE	223521	3	III+DAB , UHF , UHF	115	34, 40, 40	15, 15, 15	5, 8	95	10

Mast amplifier



MAK2510LTE

Serie MAK

MAK mast amplifier mixes and amplify signals coming from different aerials. Metal frame chassis fullshielded with F connectors. **Quick and easy installation.** Remote feeding on each input.

- Separate amplification between VHF and UHF
- Selectable remote feeding on all inputs (100mA max)
- Supply 12V. Gain adj. on all inputs
- Mast strap up to 60mm Ø
- Working temperature from -10 to 55°C.
- (*) special tuning

Item	Code	IN	Bands	Out. Lev. (dBμV)	Gain (dB)	Adj. (dB)	Noise figure (dB)	Current cons. (mA)	Pack. Pcs
MAK2510LTE	223387	1	III + DAB + IV + V	115, 118	21, 25, 25	20, 20, 20	4, 8	105	1
MAK2331LTE	223389	3	III+DAB , UHF , UHF	115, 118	21, 23, 23	20, 20, 20	4, 8	85	1
MAK2340LTE	223393	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2340LTE/..*	223390	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2340LTE/40-42	223388	4	III+DAB , IV , V , UHF	115, 118	19, 22, 22, 22	20, 20, 20, 20	4, 8	85	1
MAK2640LTE	223392	4	III+DAB , IV , V , UHF	115, 120	30, 30, 30, 30	20, 20, 20, 20	4, 8	175	1
MAK2640LTE/..*	223391	4	III+DAB , IV , V , UHF	115, 120	30, 30, 30, 30	20, 20, 20, 20	4, 8	175	1

Electronic Mast and indoor equipment

Line Amplifiers



AT Series

Indoor/outdoor wide band line amplifier 174-790MHz, gain 14dB, developed to be used as pre amplifier with remote supply from the output

- Built in LTE filter
- IP66 outdoor mounting
- 12Vdc

AT14LTE59

Item	Code	IN	Input bands	Gain (dB)	Out. Lev. (dBμV)	Noise figure dB	Current cons. (mA)	Pack. Pcs
AT14LTE59	226712	1	VHF + UHF	14	115	2	30	1
AT14LTE60	226713	1	VHF + UHF	14	115	2	30	1

POWER SUPPLY UNIT

PSU and MINI POWER series

High efficiency switching power supply unit, low consumption, fully shielded.



MINIPOWER12P



MINIPOWER12



PSU412

Item	Code	Outputs	Voltage Mains (Vac,Hz)	Max. current (mA)	Bands MHz	Plug	Insertion loss (dB)	Pack. Pcs	Dimensions mm
MINIPOWER12P	270020	1	12	200	5-862	B type	0.5	1	42 x 56 x 38
MINIPOWER12	270021	1	12	200	5-862	Clamp	0.5	1	42 x 56 x 38
PSU412	289562	2	12	200	5-862	B type	4	1	92x49x109
MINIPOWER24P	270023	1	24	130	5-862	B type	0.5	1	42x56x38
MINIPOWER24	270024	1	24	130	5-862	Clamp	0.5	1	42x56x38
PSU342	289564	2	24	100	5-862	B type	4	1	92x49x109
PSU511	289851	1	12	200	5-2400	B type	2	1	92x49x109

POWER SUPPLY UNIT



AM50N

AM Series

AM series power supply unit to cover several needs, from 50 to 100mA, clamp coaxial connector

- Out voltage 12Vdc
- Working temperature from -10 to 55°C.
- Clamp Connectors
- Isolation Class II
- Mains 220-230Vac 50-60Hz.
- Dimensions 50x87x46 mm.

Item	Code	Outputs	Voltage Mains (Vac,Hz)	Max. current (mA)	Bands (MHz)	Insertion loss (dB)	Connector	Pack. Pcs
AM50N	289112	1	12	50	5-862	0.2	Clamp	20
AM100N	289113	1	12	100	5-862	0.2	Clamp	20
AM102N	289119	2	12	100	5-862	4	Clamp	20

Indoor Amplifier



AFI121T

AFI series

Indoor amplifier with built in power supply and F connector to amplify and distribute DVB/T-T2 and DVB/S-S2 signals on residential buildings, houses or flats.

- Switching power supply, low power consumption
- Built in screwdriver to adjust gain and slope
- Under cover adjustment
- Hidden wall mount screws
- Green led - power on
- Mains 220-230Vac 50-60Hz.
- Isolation Class II
- Working temperature from -10 to 55°C.

Item	Code	IN	Bands	Outputs	Out. Lev. (dBμV)	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Pack. Pcs
AFI121T	223231	1	VHF , UHF	2	111	15, 15	-	4, 4	1
AFI122T	223230	1	VHF , UHF	1	115	20, 20	15, 15	4, 4	1
AFI122T	223233	1+ return path	VHF , UHF , UHF 2	2	115	10, 20, 20	15, 15, 15	5.5, 5.5, 5.5	1
AFI1313T	223236	3 separate adj.	FM , III+DAB , UHF	1	117	24, 24, 24	15, 15, 15	4.5, 4.5, 4.5	1
AFI123T	223235	1	VHF , UHF	2	113	30, 30	15, 15	4.5, 4.5	1
AFI123W	223237	1	VHF , UHF , SAT	1	117	20, 20	20, 20	5.5, 5.5, 6.5	1
AFI12LTE700AUS	223240	1	VHF , UHF	1	115	20, 20	15, 15	4, 4	1

Electronic Mast and indoor equipment

Indoor Amplifier



MINIBOOST Series

- Wide band amplifier
- High efficiency in small dimensions
- Fully shielded
- F type connector
- Green led - power on
- Mains 220-230Vac Isolation class II.
- Operating temperature 0 ÷ 45°C.

MINIBOOST

Item	Code	IN	Bands	Gain (dB)	Noise figure (dB)	Mains (Vac, Hz)	Out. Lev. (dBμV)	Pack. Pcs
MINIBOOST	270025	1	III+DAB, UHF	12, 12	4, 4	220-230, 50/60	115	1

Indoor Modulator

Digital modulator Series

High quality digital indoor DVB-T modulator, HDMI input or baseband stereo input.
High resolution up to Full HD 1920*1080-30fps, high quality output signals MER-35dB designed to modulate and distribute an HD source or analog source (i.e. Audio/Video Player, computer, TVCC cameras) in a domestic system.

- Video coding HD (MPEG-4 AVC/H.264)
- High resolution (fino a 1920x1080-30fps)
- High bitrate (up to 19Mb/s)
- MER 35dB on UHF channels
- Quick and easy installation thanks to 7 segment display and keys on the front panel.



MOD-HDTV

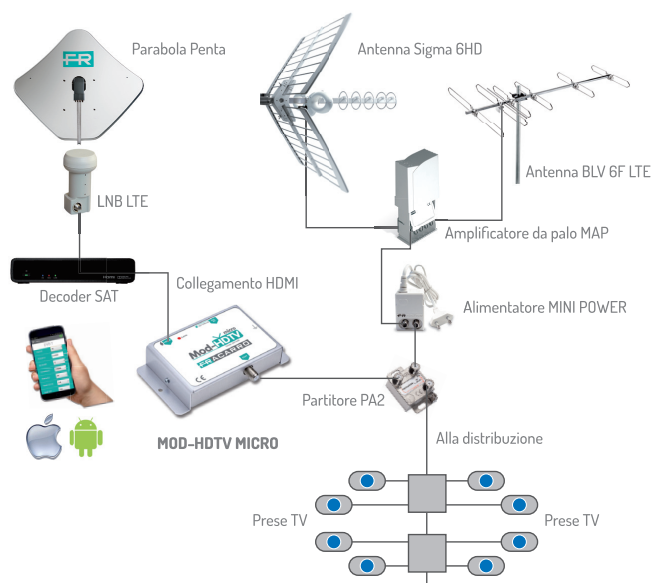


MOD-HDTV MINI



MOD-HDTV MICRO

Installation example



Indoor Modulator



MOD-HDTV



MOD-HDTV MINI

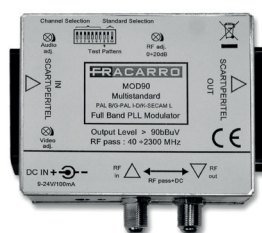


MOD-HDTV MICRO

Item		MOD-HDTV	MOD-HDTV MINI	MOD-HDTV MICRO
Code		287400	287406	287429
Input no.		2	1	1
Output no.		1	1	1
Connectors		2 x F Female(RF), 3xRCA (analog.IN), 1xHDMI (digital IN), 1x USB	1 x F Female (RF), 1xHDMI (digital IN), 1x USB	1 x F Female (RF), 1xHDMI (digital IN), 1x Bluetooth
Input				
Input 1		HDMI	HDMI	HDMI
Input 2		CVBS	-	-
Video Coding		MPEG-4 AVC / H.264	MPEG-4 AVC / H.264	MPEG-4 AVC / H.264
Bitrate Video	Mbps	1-19	1-19	1-19
Video profile		High profile 4.0	High profile 4.0	High profile 4.0
Video resolution		1920x1080@30fps HDMI 720x576@25fps	1920x1080@30fps HDMI 720x576@25fps	1920x1080@30fps HDMI 720x576@25fps
Audio type		HDMI & mono/stereo	HDMI	HDMI
Audio Standard		MPEG-1 Layer II	MPEG-1 Layer II, AAC, AC3	MPEG-1 Layer II, AAC, AC3
Bitrate Audio	Kbps	64, 96, 128, 256, 320, 384	64, 96, 128, 192, 256, 320, 384	64, 96, 128, 192, 256, 320, 384
Audio level	Vpp	0.5 (adjustable)	0.5 - 1 (adjustable)	0.5 - 1 (adjustable)
Output				
Trasponder No.		1	1	1
Modulation		DVB-T (EM300744)	DVB-T (EM300744)	DVB-T (EM300744)
Costellation		QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM	QPSK, 16QAM, 64QAM
Channels		E5-E12, E21-E69	E5-E12, E21-E69	E21-E69
Bands	MHz	174-230, 470-762	174-230, 470-862	174-230, 470-862
Freq. step	MHz	1	1	1
Freq. band	MHz	6, 7, 8	6, 7, 8	6, 7, 8
Carriers		2K, 8K	2K, 8K	2K, 8K
Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8
Max out ùlevel	dBuV	90	90	90
Level adj.	dB	20	20	20
MER	dB	35@UHF	35@UHF	35@UHF
MIX band	MHz	47-862	47-862	47-862
insertion loss	dB	1	1	1
other features				
Configurable parameters		Service name, service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name	Service name, service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name	Service name, service ID, video PID, audio PID, PMT PID, TS ID, ONID, networkID, provider name
LCN		yes (nordig, ITC/UK, EICTA/Europa, Nuova zelandà)	yes (nordig, ITC/UK, EICTA/Europa, Nuova zelandà)	yes (nordig, ITC/UK, EICTA/Europa, Nuova zelandà)
Supply voltage	V, mA	12, 400max	12, 340max	12, 290max
Operating temperature		from 0 to 50°	from 0 to 50°	from 0 to 50°
Dimensions		200 x 102 x 41	200 x 102 x 41	131 x 81 x 27

Electronic Mast and indoor equipment

Indoor Modulator



MOD90

Analog modulator Series

Fullband indoor analogue modulator, double side band. easy set up thanks to the dip switch and the built in display. PLL syntesis assure a stable frequency set up. Modulator can be remotely feeded from the output connecto or locally with an external power supply. Packing 1 pc.

- Designed to distribute signals coming from STB without a built in modulator.
- Audio and video level adj.
- Multistandard

				MOD90	MOD90R
Code				280001	280002
Composite video input	Frequency range	MHz		20-6000	20-6000
	Input Level	Vpp		0.5-1.5	0.5-1.5
	Impedance	Ohm		75	75
Audio input	Frequency range	MHz		40-15000 (SCART)	40-15000 (RCA)
	Input Level	mVpp		0.2-3	0.2-3
	Impedance	0Khm		10	10
	Level Adj.	dB		Trimmer Adj.	Trimmer Adj.
RF Output	Output Level	dBμV		90	90
	Out.Lev. adj	dB		0-20 with trimmer	0-20 with trimmer
	Available standard			Multi-standard, PAL, B/G, I, D/K, SECAM, L, H	Multi-standard, PAL, B/G, I, D/K, SECAM, L, H
	Output ferq. range	MHz		47-862	47-862
Audio	n°1	MHz		5.5, 6.0, 6.5	5.5, 6.0, 6.5
Fine frequency video adj.		MHz		±2.25 step 0.25 (programmable)	±2.25 step 0.25 (programmable)
Carrier ratio	Audio1/video	dB		12-16	12-16
	Audio2/video	dB		21±3	21±3
Modulation with		%		100	100
S/N ratio		dB		×57	×57
Spurious reaction				54	54
Main features					
Consumption		mA		100	100
Supply voltage		V		9/24	9/24
Conformity				EN 50083-2	EN 50083-2
Test Signal				Black screen with white stripes (dip8)	Black screen with white stripes (dip8)
operating temperature		°C		-10 a +55	-10 a +55
DC passthrough				F tyoe connector	F tyoe connector
Dimensions		mm		100 x 75 x 30	80 x 75 x 30

Indoor Modulator



MOD90S

Analog modulator S Series

double side band Stereo Audio/Video modulator, stabilized PLL output frequency.
VHF or UHF frequency output with multistandard modulation allow the installation on several systems..

MOD90S			
Code			287058
Composite video input	Frequency range	Hz-MHz	20-6
	Input Level	Vpp	0.9-11
	Impedance	Ohm	75
Audio input	Frequency range	MHz	20-15000
	Input Level	mVpp	775
	Impedance	OKhm	10
	Freq. deviation	KHz	±50
RF Output	Level Adj.	dB	±6
	Output Level	dBμV	90
	Out lev. adj.	dB	0-20
	Available standard		R/G, D/K, H, I, SECAM, L, M/N
Audio	Output ferq. range	MHz	47-68, 170-300, 470-862
	n°1	MHz	4.5, 5.5, 6.0, 6.5
	2	MHz	5.742
Fine frequency video adj.		MHz	±2.25 step 0.25 (programmable)
Carrier ratio	Audio1/video	dB	12-16
	Audio2/video	dB	21±3
Modulation with		%	81
S/N ratio		dB	×55
Spurious reaction			-
Main features			
Consumption		W	2.5
Supply voltage		Vac,Hz	230, 50
Conformity			EN 50083-2
Test Signal			Black screen with white stripes
operating temperature		°C	- 10 to +40°
Remote feeding		mA	-
Dimensions		mm	133 x 73 x 39

Electronic Mast and indoor equipment

Channel processor



MCP/UU

Channel processor series

Channel processor to frequency convert analog or digital channel, from any frequency on UHF band to any other. Input and output frequencies can be selected through the built in dip switches. Saw technology allows the conversion also on adjacent channels; the product can be used also as a filter with ISO frequency conversion. 20dB gain adjustment.

- Double conversion to reduce any spurious signal
- Saw filtering
- High input dynamics
- Input mix to add channels from other directions
- ICP/UU indoor use and MCP/UU outdoor use

		ICP/UU	MCP/UU
Code		223367	223366
Inputs	No.	2	2
	n°1	1ch-UHF	1ch-UHF
	2	III+S+UHF	III+S+UHF
Outputs	No.	1	1
	n°1	III+S+UHF+1ch	III+S+UHF+1ch
IN 1 Conversion			
Channels	No.	21-69	21-69
Channel selection		Dip-switch	Dip-switch
Freq. step	MHz	8	8
Gain	dB	15	15
Gain adj.	dB	20	20
Phase noise	dBc/Hz	80@10KHz	80@10KHz
Max out Lev.	dBμV	90 (IM3-54dBc 2 toni)	90 (IM3-54dBc 2 toni)
Max out lev. DTT	dBμV	97 (IM3-35dBc 2 toni)	97 (IM3-35dBc 2 toni)
Max input lev.	dBμV	90	90
In 2 MIX			
Freq. band	MHz	47-862	47-862
insertion loss	dB	-4	-4
Main features			
Consumption	W/mA	5	170
Supply voltage	Vac,Hz/Vdc	220-240, 50-60	12
operating temperature	°C	-5 to +55	-5 to +55
Dimensions	mm	127 x 58 x 128	127 x 58 x 129

Multiband amplifier



J31B

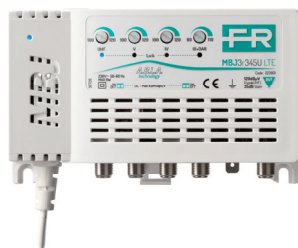
J series

Push-Pull line amplifier with really high band flatness, fully shielded with F connectors.

- EN 60065 e EN 50083-2 conformity .
- Working temperature from -10 to 55°C.
- Mains 220-230Vac 50-60Hz.

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBμV)
J21B	223023	1	III+DAB , UHF	21	15	10	117
J31B	223024	1	III+DAB , UHF	31	15	10	117

Multiband amplifier



MBJ3r345U LTE

MBJ EVO Series

Indoor multi input amplifier to mix and amplify signals coming from different aerials

The innovative A.B.L.A. (Automatic Building Level Adjustment) function is able to keep stable the set up through a trimmer output level.

- **A.B.L.A. Technology**
- Separate amplification VHF/UHF
- High shielding
- ABS (V0 class) chassis
- -60% volume
- DIN rail clamp
- Switching power supply (>80% efficiency)
- Mains 220-230Vac Isolation class II.
- Short circuit protection
- operating temperature -10 to +55°C
- (*) special tuning

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBμV)
MBJ2r3+4+5 LTE	223609	1	III+DAB , IV , V	25, 25, 25	20, 20, 20	6, 9, 9	110, 115
MBJ3r3+4+5 LTE	223608	1	III+DAB , IV , V	35, 35, 35	20, 20, 20	6, 6, 6	110, 120
MBJ3r3U LTE	223607	2	III+DAB , UHF	35, 35	20, 20	6, 6	110, 120
MBJ2r3UU LTE	223606	3	III+DAB , UHF , UHF	20, 20, 20	20, 20, 20	6, 9, 9	110, 115
MBJ2rFM+3UU LTE	223611	3	FM+III+DAB , UHF , UHF	20, 20, 20, 20	20, 20, 20, 20	6, 6, 9, 9	110, 115
MBJ3r3UU LTE	223605	3	III+DAB , UHF , UHF	32, 32, 32	20, 20, 20	6, 9, 9	110, 120
MBJ3rFM+3UU LTE	223610	3	FM+III+DAB , UHF , UHF	32, 32, 32, 32	20, 20, 20, 20	6, 6, 9, 9	110, 120
MBJ2r345U LTE	223603	4	III+DAB , IV , V , UHF	20, 20, 20, 20	20, 20, 20, 20	6, 9, 9, 9	110, 115
MBJ2r345U LTE/..*	223604	4	III+DAB , IV , V , UHF ...	20, 20, 20, 20	20, 20, 20, 20	6, 9, 9, 9	110, 115
MBJ3r345U LTE	223601	4	III+DAB , IV , V , UHF	35, 35, 35, 35	20, 20, 20, 20	6, 9, 9, 9	110, 120
MBJ3r345U LTE/..*	223602	4	III+DAB , IV , V , UHF ...	35, 35, 35, 35	20, 20, 20, 20	6, 9, 9, 9	110, 120

A.B.L.A. Technology



A.B.L.A. Technology Automatic Building Level Adjustment

Tramite l'accensione dei LED, l'amplificatore indica automaticamente se il segnale in ingresso è corretto, mantenendo il livello di uscita desiderato con un'elevata dinamica.

A.B.L.A. Technology è un'esclusiva Fracarro.

Electronic Mast and indoor equipment

Multiband amplifier

MBX Series

Multiband amplifier to amplify and mix signals coming from different aerials.

Zinc alloy die cast housing fully shielded

Separate amplification between VHF and UHF up to 125dBuV with push pull amplification

High gain and high output level to be used on building and residential system.



- High output level up to 130dBuV
- Test output -30dB
- Gain adj. under the metal cover
- Switching power supply (>80% efficiency)
- Remote feeding on all inputs, 100mA
- Mains 220-230Vac Isolation class II.
- operating temperature -10 to +55°C
- (*) special tuning

MBX5540LTE

Item	Code	IN	Bands	Gain (dB)	Adjustment (dB)	Noise figure (dB)	Out. Lev. (dBμV)
MBX5540LTE	235109	4	III+DAB , IV , V , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 8.5, 8.5, 8.5	122, 125
MBX5540LTE/..*	235113	4	III+DAB , IV , V , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 8.5, 8.5, 8.5	122, 125
MBX5541LTE	235111	4	FM , III+DAB , UHF , UHF	31, 30, 30, 30	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5710	235025	1	VHF , UHF	43, 43	20, 20	4.5, 6	122, 125
MBX5720	235021	2	VHF , UHF	43, 43	20, 20	4.5, 6	122, 125
MBX5740LTE	235108	4	III+DAB , IV , V , UHF	38, 43, 43, 43	20, 20, 20, 20	4.5, 7.5, 7.5, 7.5	122, 125
MBX5740LTE/..*	235112	4	III+DAB , IV , V , UHF	38, 43, 43, 43	20, 20, 20, 20	4.5, 7.5, 7.5, 7.5	122, 125
MBX5741LTE700	235115	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5741LTEUK	235114	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5741LTE	235110	4	FM , III+DAB , UHF , UHF	35, 38, 43, 43	20, 20, 20, 20	4.5, 4.5, 7.5, 7.5	122, 125
MBX5851	235016	5	FM , III+DAB , UHF , UHF	34, 34, 44, 44	20, 20, 20, 20	5, 5, 8.5, 8.5	122, 125
MBX7740/35-36	235105	4	III+DAB , IV , V , UHF	40, 40, 40, 40	20, 20, 20, 20	11, 11, 11, 11	130, 130
MBX7741	235006	4	FM , III+DAB , UHF , UHF	40, 40, 40, 40	20, 20, 20, 20	11, 11, 11, 11	130, 130

AMPLIFICATORI DI TESTA SATELLITE

Serie AMP

Satellite amplifier with terrestrial mix in to be used as sat booster for IF IF system .

Wall mount support (MBX0001) to keep space on the product back for cable pass through.

- Low RF insertion loss
- Switching power supply (>80% efficiency)
- Gain adj. under the metal cover
- Mains 220-230Vac Isolation class II.
- Working temperature from -10 to 55°C.



AMP9764

Item	Code	IN No.	Bands	Out Lev (dBμV)	Gain (dB)	Adjustment (dB)	Noise figure (dB)
AMP9764	235053	2	VHF / UHF / SAT	- , 125	-2, -2, 40	- , - , 20	- , - , 10
AMP9564	223371	2	RC / FM / VHF / UHF / SAT	- , 120	-2, -2, 37-43	- , - , - , 20	- , - , - , 7
AMP9762	235051	1	RC + VHF + UHF	115	25, 25	20, 20	3, 3
AMP9762B	235055	1	RC + VHF + UHF	120	40, 40	20, 20	9, 9
AMP9763	235052	1	RC + VHF + UHF + SAT	120, 125	40, 40, 40	20, 20, 20	8, 8, 10
AMP9763B	235056	1	RC + VHF + UHF + SAT	120, 125	41, 41, 41	20, 20, 20	9, 9, 10
AMP9762UK	235054	1	RC + VHF + UHF	115	25, 25	20, 20	3, 3
AMP522PL	289601	1	RC + VHF + UHF	124	30-38, 30-38	0-22, 0-22	8, 8

Electronic Mast and indoor equipment

Programmable headends



FRPRO EVO HD

FRPRO EVO HD Sereis

FRPRO EVO HD headends family to realize high selectivity programmable filters

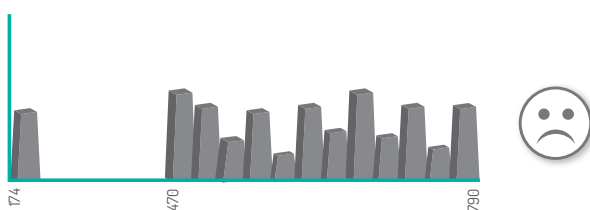
FRPRO EVO HD headends are able to filter, frequency convert, amplify and distribute a large number of DVB-T2/T digital terrestrial muxes both in VHF or UHF band.

- Perfect signal equalization
- Isofrequency filtering or freq. conversion
- AGC on each mux
- Automatic LTE filtering
- Easy and quick installation

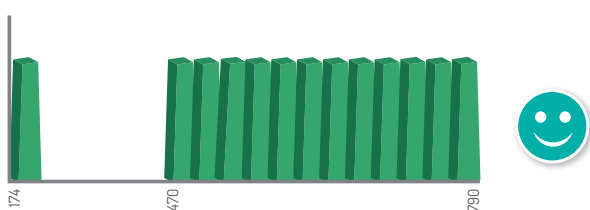
FRPRO EVO HD		
Code		287434
Inputs	No.	4
Input bands	MHz	FM , 4x VHF/UHF
Lte protection	MHz	470-862 or 470-790 or 470-694 AUTO LTE Filter
Max out. Lev	dBμV	120(60dBIM3) 113 (per 1 MUX) 110 (per 6 MUX)
Gain adj.	dB	>45 (auto AGC)
Main adj	dB	20
Slope adj	dB	Slope 9dB
Selectivity	dB	35@1MHz
MER	dB	35
Main features		
Load and save configuration		SD card
Connector		F Female
Remote voltage	V	12/24
current feedinf	mA	100
Consumption	W	16
Supply voltage	Vac,Hz	220-240, 50-60
Pcs		1
Conformity		EN60065: 2004-06, EN50083-2: 2002-05
Protection		IP20
operating temperature	C°	-5 to +50°
Dimensions	mm	217x165x59

Perfect Eaulization

Segnale in ingresso NON equalizzato



Segnale in uscita perfettamente equalizzato e amplificato



Programmable filters



FIL 10

FIL Series

Programmable filter headend, 10 cluster, each cluster can filter from 1 to 6 channel on all the UHF band. 10 clusters, fully programmable and all of them can be connected to any UHF input.

- Programmable through built in keyboard and LCD display LCD or through PC software.
- The configuration can be loaded on the product or copied into a USB stick
- Autoalignment function to realize a flat distribution with the automatic gain setup
- Input UHF matrix fully flexible, cluster can be connected to all of them
- Compact design
- Mains 220-230Vac Isolation class II.
- Operating temperature 0 ÷ 45°C.

FIL 10			
Code			272108
Inputs	No.		4
Outputs	No.		1
Input bands			III+DAB / UHF / UHF 2 / UHF 3
III+DAB	Frequency	MHz	174-320
	Gain	dB	18
	Max input lev.	dBµV	100
	Max out. Lev	dBµV	90
	Gain adj.	dB	20
	Noise figure	dB	6
UHF	Frequency	MHz	470-790
	Gain	dB	18
	Gain adj.	dB	20
	Noise figure	dB	6
UHF 2	Frequency	MHz	470-790
	Gain	dB	18
	Gain adj.	dB	20
	Noise figure	dB	6
	Max input lev.	dBµV	90
	Max out. Lev	dBµV	90
Cluster		No.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Remote feeding on all inputs, 100mA		V	12/24
auto alignment		dB	20
Cluster	Selectivity	dB	20@10MHz
Cluster	Bandwidth	MHz	8-48 (1-6ch)
Return loss		dB	-
Main features			
Load and save configuration			USB 2.0 (FAT 32)
Connector			F Female
Consumption		W	25
Supply voltage		Vac,Hz	220-240

COMPACT Headend

D-MATRIX Series Trasmodulation from DVB-S2/T2/C to DVB-T	70
3DGFLEX Series Trasmodulation from DVB-S2/T2/C to DVB-T	72
3DGFLEX Series Trasmodulation from DVB-S2/T2/C to DVB-T	74
3DGFLEX ASI Series Trasmodulation from ASI to DVB-T	76
3DGFLEX IP Encoder IPTV Series	77
3DG-BOX Control unit and box for 3DG Series	78
COMPACT LINE Trasmodulation from DVB-S to Analog Series	79
DIGIFLEX Series Trasmodulation from DVB-S to DVB-T	81

K SERIES

Serie K120L Single channel amplifier	83
KS Trasmodulation from DVB-S to DVB-T Series	84
KD Series Trasmodulation from DVB-S to analog	80
KDS Series Trasmodulation from DVB-S to analog	81
KCP Series DVB-T frequency channel processor	83
KM Series Analog VSB Modulator	84
KX Satellite amplifier Series	86
KFT Series transponder amplifier	86
KFT Series transponder amplifier	87
KW wide band amplifier Series	88
KP Series Switching power supply	88

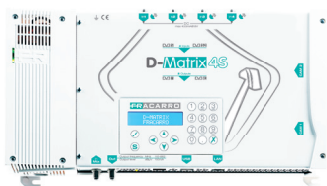
HEADLINE Series

DVB-T receiver Series	89
DVB-S receiver Series	91
Analog modulator Series	93
DVB-T Modulator Series	95
Encoder FROM analog/HDMI to ASI Series	96
Encoder from DVB-T/S (Free to air) to IP Series	97
Encoder from TS (Transport stream) to IP Series	98
Head line optical transmitter Series	99
SPLITTER series	100
SUB Rack Series	100
Programming unit Series	101

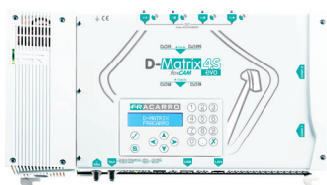
RACK

RACK Series	101
RACK accessories	101

COMPACT Headend



D-MATRIX 4S



D-MATRIX 4S EVO



D-MATRIX 8T

D-MATRIX Series Trasmodulation from DVB-S2/T2/C to DVB-T

The new D-Matrix compact headend range will introduce a revolutionary concept: a unique mechanics is able to receive many satellite or digital terrestrial contents, in HD or SD standard definition, coming from different and independents inputs and remodulate them on "customized" RF output multiplexes. Thanks to the universal slots, the compact headend can decrypt the desired programs by using the proper CAM and professional smart cards.

- Fully manageable parameters for all the muxes and individual programs (LCN, SID, PSD, NIT, ...).
- "Mux-ad-Hoc": you can create a mux with the choosen programs from up to 4 satellite transponders and manage all the descriptor parameters of each mux (ONID, TSID, NetID,...) and each program inside the mux (LCN, SID, PID, Program name...).
- **ARP 2.0: Automatic Recovery Procedure** to save the higher priority programs and guarantee Continuity of Service when bit rate overflows occur. All the program are sequentially restored when the global bit rate returns within the limits.
- **WEB interface** based headend: setup, and configuration must be done by using web interface built-in; basic setup available by on board keyboard.
- **USB Port** to upload/download presets or for the firmware upgrade, **videoplayback** (TS file format).

			D-MATRIX 4S	D-MATRIX 4S EVO	D-MATRIX 8T
CodE			283131	283132	283133
Inputs					
	Tuners	No.	4	4	8 (2 each connector)
	Demodulation		DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-T2, DVB-T o DVB-C (selectable)
	Bands	MHz	950-2150	950-2150	110-862 (170-862 for the first coax IN)
	Channels		-	-	E5-E69
	Larghezza canali	MHz	7,8	7,8	7,8
	AFC Dynamics	MHz	±5	±5	±400 (DVB-T2/T), ±100 (DVB-C)
	Symbol rate	Msymb/sec	2-45	2-45	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)
	Remote feeding	mA	100 max (14V)	400 max (14V)	200 max (12V)
	LNB controls		DiSEqC 1.0	DiSEqC 1.0	-
	Carrier No.		-	-	2k, 8k
	Level	dBpV	50-80	50-80	55-85
Outputs					
	Generated channels	No.	2	4 (2 couple of adjacent mux)	8 (2 quartine of adjacent mux)
	Standard		DVB-T / DVB-C	DVB-T / DVB-C	DVB-T
	Channel range		S2-E69	S2-E69	S2-E69
	Frequency	MHz	111-862	111-862	111-862
	Freq. step	KHz	250	250	250
	Level	dBpV	100	95	95

Headend

			D-MATRIX 4S	D-MATRIX 4S EVO	D-MATRIX 8T
	Level adj.	dB	0-20	0-20	0-20
	Flatness		±1.5	±1.5	±1.5
	MER	dB	≥36	≥36	≥36
	Spurious rejection	dB	<-50	<-50	<-50
	Spectrum		Normal, inverted	Normal, inverted	Normal, inverted
	Operating mode		Normal, single carrier	Normal, single carrier	Normal, single carrier
DVB-T Modulation					
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM
	Channel band	MHz	6, 7, 8	6, 7, 8	6, 7, 8
	Carrier No.		2k, 8k	2k, 8k	2k
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8
DVB-C modulation					
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
	Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate	Related to the output symbol rate
	FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)	Reed Solomon (204, 188)
	Symbol rate	Msymb/sec	1000-6999	1000-6999	1000-6999
Main features					
	USB		Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)
	Programming mode		Web interface,keyboard and display	Web interface,keyboard and display	Web interface,keyboard and display
	Supply voltage	V, Hz	184-264, 50-60	184-264, 50-60	184-264, 50-60
	Consumption	W	42 (with 2 CAM)	42 (with 2 CAM)	42 (with 2 CAM)
	Common interface		2 x PCMCIA (Standard EN50221, TS10169)	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode
	Dimensions	mm	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)	360 x 230 x 54 (without CAM) 385 x 230 x 54 (with CAM)
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	°C	-5 to +55 (without CAM)	-5 to +55 (without CAM)	-5 to +55 (without CAM)

COMPACT Headend

3DGFLEX Series Trasmodulation from DVB-S2/T2/C to DVB-T

The 3DGFLEX is a modular headend designed to process a range of digital signals ready to be distributed over a centralised system, such as large apartment buildings or hospitality environments, by using a combination of different twin modules it's possible to perform a remultiplexing of different contents (satellite or DTT programs, ASI sources) and distribute them on the centralized coaxial network.

- **"Smart & Pool"** through the bidirectional Back-Panel bidirezionale ad alta velocità per lo scambio dei contenuti con i moduli nuovi inseriti nella stessa centrale (funzionalità disponibile solo per i nuovi moduli EVO)
- MUX ad Hoc agile QAM or DTT: Create a mux with the chosen programs from up to 3 different sources (two connectors and one TS available coming from back panel) and manage all the descriptor parameters: just drag and drop the available channels into the mux.
- USB Port to upload/download pre-setted set up or for the firmware upgrade, in the new generation is also possible play .TS video
- **Auto Remapping** Function: You can change a program in real time within the mux without the need to retune all the TV sets in the system.
- Web based interface: The headend can be remotely programmed or monitored anytime or anywhere (PC and mobile). When a change is detected in the users configuration an alert e-mail is automatically sent.
- ARP 2.0: Automatic Recovery Procedure to save the higher priority programs and guarantee Continuity of Service when bit rate overflows occur. All the program are sequentially restored when the global bit rate returns within the limits.
- FPGA technology: enables a flexible and efficient way of upgrading a system, using the latest state of the art technology.
- Remote management included to monitor and edit the set up of the headend remotely.
- USB Port to upload/download pre-setted set up or for the firmware upgrade, in the new generation is also possible play .TS video

DVB S2



		3DG-2S2-2T	3DG-4S2-4T	3DG-4S2-BP
CodE		283157	283162	283163
Inputs				
	Tuners	No.	2	4
	Demodulation	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)	DVB-S2 (8-PSK, QPSK), DVB-S (QPSK)
	Bands	MHz	950-2150	950-2150
	AFC Dynamics	MHz	±5	±5
	Symbol rate	Msymb/sec	2-45	2-45
	FEC	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Remote feeding	mA	100 max (18V)	4x125 max (14/18V)
	LNB controls	DiSEqC 1.0	DiSEqC 1.0	DiSEqC 1.0
	Level	dBμV	48-80	50-80
Back panel				
	Connectors	Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type	Parallel	Serial	Serial
	Max Bitrate	Mbit/sec	270	1000 bidirectional

		3DG-2S2-2T	3DG-4S2-4T	3DG-4S2-BP
Outputs				
	Generated channels	No.	2	4 (2 couple of adjacent mux)
	Standard		DVB-T / DVB-C	DVB-T / DVB-C
	Channel range		S2-E69	S2-E69
	Frequency	MHz	111-862	111-862
	Freq. step	KHz	250	250
	Level	dBμV	102	95
	Level adj.	dB	0-15	0-20
	Flatness		±1.5	±1.5
	MER	dB	≥36	≥36
	Spurious rejection	dB	<-40	<-50
	Spectrum		Normal, inverted	Normal, inverted
	Operating mode		Normal, single carrier	Normal, single carrier
DVB-T Modulation				
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM
	Channel band	MHz	6, 7, 8	6, 7, 8
	Carrier No.		2000, 8000	2000, 8000
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8
DVB-C modulation				
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM
	Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate
	FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)
	Symbol rate	Msymb/sec	1000-6999	1000-6999
other features				
	USB		SW upgrade	Software update and video plaing (type A, FAT32 filesystem, fileformat .TS)
	Programming mode		Web interface,keyboard and display	Web interface,keyboard and display
	Consumption	W	11 (without CAM); 13 (with 2 CAM), extraconsumo DVB-C 1.3	15 (without CAM), 20 (with CAM), extraconsumo DVB-C 1.3
	Dimensions	mm	245x208x54	245x208x54
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	°C	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)

COMPACT HEADEND
**3DGFLEX Series Trasmodulation from
DVB-S2/T2/C to DVB-T**
DVB T
DVB T2


			3DG-2T2-2T	3DG-4T2-4T	3DG-4T2-BP
CodE			283159	283165	283166
Inputs					
	Connectors	No.	2 x F female	4 x F female	4 x F female
	Demodulation		DVB-T2, DVB-T o DVB-C (selectable)	DVB-T2, DVB-T o DVB-C (selectable)	DVB-T2, DVB-T o DVB-C (selectable)
	Bands	MHz	174-862	174-862	174-862
	Channels		E5-E69	E5-E69	E5-E69
	Larghezza canali	MHz	6,78	6,78	6,78
	AFC Dynamics	MHz	±400 (DVB-T2/T), ±100 (DVB-C)	±400 (DVB-T2/T), ±100 (DVB-C)	±400 (DVB-T2/T), ±100 (DVB-C)
	Symbol rate	Msymb/sec	-	-	-
	FEC		1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)	1/2, 2/3, 3/4, 5/6, 7/8 Reed Solomon (204, 188)
	Remote feeding	mA	2 x 100 max (12V)	2 x 100 max (12V)	2 x 100 max (12V)
	LNB controls		-	-	-
	Carrier No.		2000, 8000	2000, 8000	2000, 8000
	Level	dBμV	40-85	40-85	40-85
	Mas Bitrate ASI		-	-	-
	Common interface		2 x PCMCIA (Standard EN50221, TS10169)	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode	2 x PCMCIA (Standard EN50221, TS10169) Flex CAM o Standard Mode
Back panel					
	Connectors		Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Serial	Serial
	Max Bitrate	Msymb/sec	270	1000 bidirectional	1000 bidirectional
Outputs					
	Generated channels	No.	2	4 (2 couple of adjacent mux)	-
	Standard		DVB-T / DVB-C	DVB-T / DVB-C	-
	Channel range		S2-E69	S2-E69	-
	Frequency	MHz	111-862	111-862	-
	Freq. step	KHz	250	250	-
	Level	dBμV	102	95	-
	Level adj.	dB	0-15	0-20	-
	Flatness		±1.5	±1.5	-

Headend

		3DG-2T2-2T	3DG-4T2-4T	3DG-4T2-BP
MER	dB	≥36	≥36	-
Spurious rejection	dB	<-40	<-50	-
Spectrum		Normal, inverted	Normal, inverted	-
Operating mode		Normal, single carrier	Normal, single carrier	-
DVB-T Modulation				
Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM	-
Channel band	MHz	6, 7, 8	6, 7, 8	-
Carrier No.		2000, 8000	2000, 8000	-
Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32	-
FEC		1/2, 2/3, 3/4, 5/6, 7/8	1/2, 2/3, 3/4, 5/6, 7/8	-
DVB-C modulation				
Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM	16QAM, 32QAM, 64QAM, 128QAM, 256QAM	-
Channel band	MHz	Related to the output symbol rate	Related to the output symbol rate	-
FEC		Reed Solomon (204, 188)	Reed Solomon (204, 188)	-
Symbol rate	Msymb/sec	1000-6999	1000-6999	-
other features				
USB		SW upgrade	Software update and video plaining (type A, FAT32 filesystem, fileformat .TS)	Software update and video plaining (type A, FAT32 filesystem, fileformat .TS)
Programming mode		Web interface, keyboard and display	Web interface, keyboard and display	Web interface, keyboard and display
Consumption	W	11 (without CAM); 13 (with 2 CAM), extraconsumo DVB-C 1.3	5 (without CAM); 20 (with 2 CAM), extraconsumo DVB-C 1.3	7 (without CAM), 12 (with CAM)
Dimensions	mm	245x208x54	245x208x54	245x208x54
Conformity		EN50083-2, EN60065	EN50083-2, EN60065	EN50083-2, EN60065
operating temperature	°C	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)	-10 to 50°C; -10 to 45°C (con CAM)

COMPACT HEADEND



3DG-2ASI-2T

3DGFLEX ASI Series Trasmodulation from ASI to DVB-T

ASI module is able to manage simultaneously 2 ASI sources.

The module is able to manage ASI streams incoming from a digital encoder or from external ASI sources as broadcaster equipment choosing in a flexible way the content to realize a 2 digital muxes on output.

3DG-2ASI-2T			
CodE		283160	
Max ASI bitrate		214	
Back panel			
	Connectors		Back Panel 48 pin
	Type		Parallel
	Max Bitrate	M symb/sec	270
Outputs			
	Generated channels	No.	2
	Standard		DVB-T / DVB-C
	Channel range		S2-E69
	Frequency	MHz	111-862
	Freq. step	KHz	250
	Level	dB μ V	102
	Level adj.	dB	0-15
	Flatness		$\pm$ 1.5
	MER	dB	$\geq$ 36
	Spurious rejection	dB	<-40
	Spectrum		Normal, inverted
	Operating mode		Normal, single carrier
DVB-T Modulation			
	Modulation		QPSK, 16-QAM, 64-QAM
	Channel band	MHz	6, 7, 8
	Carrier No.		2k, 8k
	Guard interval		1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8
DVB-C modulation			
	Modulation		16QAM, 32QAM, 64QAM, 128QAM, 256QAM
	Channel band	MHz	Related to the output symbol rate
	FEC		Reed Solomon (204, 188)
	Symbol rate	M symb/sec	1000-6999

3DG-2ASI-2T			
Main features			
USB		SW upgrade	
Programming mode		Web interface, keyboard and display	
Consumption	W	11	
Dimensions	mm	245x208x54	
Conformity		EN50083-2, EN60065	
operating temperature	°C	-10 to 50°C	

COMPACT HEADEND



3DG-BP-IP OUT

3DGFLEX IP Encoder IPTV Series

3DG-EVO IPTV multicast/unicast encoder, developed on 3DGFLEX platform to distribute IPTV signals on medium and big hospitality installations.

The item can be combined with 3DGFLEX EVO new generation receivers i.e. 3DG-4S2-BP (QUAD satellite receiver) or 3DG-4T2-BP (digital terrestrial receiver). Sharing all the information through the bidirectional high speed back-panel the solution allow a mixed Terrestrial/Sat IP distribution..

- "Smart&Pool" technology allow the reception of the signals through the high speed Back panel.
- Up to 64 multicast IPTV (UDP, RTP/UDP) program on each module.
- Up to 1Gbit/s on each module to distribute UHD, HD, SD and radio channels on an IP network
- Built in service discovery SAP e M3U functions.
- Single program Transport Stream (SPTS) or multi program (MPTS) management
- DRM (Digital Right Management) ready

3DG-BP-IP OUT			
CodE		283164	
Back panel			
Connectors		Back Panel 48 pin	
Type		Serial	
Max Bitrate	M symb/sec	1000 (bidirectional)	
IP Output			
Connector		IEEE 802.3ab 1Gbps ethernet (10/100/1000)	
Standard		DVB-IPTV (ETSI TS102034 v1.5.1)	
Incapsulation		UDP, RTP/UDP	
Protocols		SAP, IGMP, M3U, DHCP	
Multicat group		64 (unicast or multicast)	
Main features			
USB		SW upgrade	
Programming mode		Web interface, keyboard and display	
Supply voltage	Vdc	14	
Consumption	W	5	
Dimensions	mm	245x208x54	
Conformity		EN50083-2, EN60065	
operating temperature	°C	-10 to 50°C	

COMPACT HEADEND

3DG-BOX Control unit and box for 3DG Series

3DG-BOX chassis has **6 available slots** to install, feed and set up all the 3DGFlex modules. The chassis contain all the needed accessories to **wall mount, ground or rack19" mounting**.



- Built in Controller host: to feed, set up and monitoring the headend in anytime from any PC.
- Built in WEB interface, display and keyboard to set up all the headend.
- Remote set up to monitor or check all the headend parameter
- USB Port to upload/download presets or for the firmware upgrade, videoplayback (TS file format).

3DG-BOX

3DG-BOX-PC

3DG-BOX		
CodE		283156
Max module No.		6
RF mix input	MHz	47-862
insertion loss	dB	2.5
Main features		
Supply voltage	Vac,Hz	184-264, 50/60
Consumption	W	105 (no CAM)
Connectors		F female (RF), RJ45 (Web interface), USB (fw upgrade)
Dimensions	mm	415x260x265
operating temperature	°C	-10 - +50 (no CAM)
Conformity		EN50083-2, EN60065

Programmation web interface

FRACARRO

3DGFlex

[Home](#)
[Operations](#)

Status

✓	3DG-CU SW 6 HW 0	INPUT 1 - Rai	INPUT 2 - Mediaset	INPUT 3 - RAI	INPUT 4 - Globecast	USB
1 ✓	3DG-4S2-BP SW 1 HW 0	INPUT 1 - ASTRA 1 MUX 1 - E25 (506.00 MHz)	INPUT 2 - ASTRA 1 MUX 2 - E26 (514.00 MHz)	INPUT 3 - ASTRA 1 MUX 3 - E27 (522.00 MHz)	INPUT 4 - ASTRA 1 MUX 4 - E28 (530.00 MHz)	USB
2 ✓	3DG-4S2-4T SW 1 HW 0	INPUT 1 - Via Eutelsat MUX 1 - E29 (538.00 MHz)	INPUT 2 - Via Eutelsat MUX 2 - E30 (546.00 MHz)	INPUT 3 - Via Eutelsat MUX 3 - E31 (554.00 MHz)	INPUT 4 - Via Eutelsat MUX 4 - E32 (562.00 MHz)	USB
3 ✓	3DG-4S2-4T SW 1 HW 0	INPUT 1 - ASTRA 1 MUX 1 - E33 (570.00 MHz)	INPUT 2 - ASTRA 1 MUX 2 - E34 (578.00 MHz)	INPUT 3 - ASTRA 1 MUX 3 - E35 (586.00 MHz)	INPUT 4 - Not Available MUX 4 - E36 (594.00 MHz)	USB
4 ✓	3DG-4S2-4T SW 1 HW 0	There are 43 enabled groups and 43 programs				
5 ⚠	3DG-BP-IPOUT SW 1 HW 0					
6 ⚠	Module not available					

COMPACT HEADEND



SIG9506

COMPACT LINE Trasmodulazione from DVB-S to Analog Series

Compact headend for the reception and distribution of 6 digital satellite

Fullband modulator (174-446MHz + 470-862MHz)

The headend can fit up to 6 QPSK receivers, 6 A/V modulators, 1 TV mixer combiner, power supply unit and keyboard+display for the set up.

A/V Outputs to connect any eventual external modulators. Built in earth bound screw.

Comply to EN500-83-2

- Quick and easy intallation
- Double side band modulator with full-band outputs (174-446MHz + 470-862MHz)
- Each single receiver can generate 14 or 18V, 22KHz tone and DiSEqC 1.0, suitable to feed an LNB or to control a multiswitch output
- Software available to set up the headend using a PC (using item KRS-RJ, not included)
- Software can be upgraded on site (using item KRS-RJ, not included)
- Heat dissipation by natural convection, no fans needed, reducing maintenance costs

SIG9506		
CodE		283126
Front-end		
Input No.	No.	6
Input frequency	MHz	950-2150
Inoput Level	dBμV	45-80
Impedance	Ohm	75
Freq. band	MHz	36
Freq. step	KHz	1
insertion loss	dB	-4 - +4
Remote feeding	V	400 (14/18V)
LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
Demodulator		DVB-S (QPSK)
FEC		Auto
Symbol rate	Msymb	2 ÷ 35 (SCPC/MCPC compatible)
AFC inteval	MHz	-2.5 - +2.5
Decoder video		MPEG-2 main profile, main level (MP@ML)
Decoder audio		MPEG-2 Layer I e Layer II
Standard color		PAL/SECAM/NTSC
Video format		16:9, pan scan, letter box
Audio Format		Mono, language 1, language 2
Teletext		-
A/V Outputs		
Video type		Composite
Video level	Vpp-Ohm	1-75
Max audio level	Ohm,mVras	600-600
Audio adj.	dB	0-10
Frequency band	MHz	20-15000
S/N ratio	dB	>52

SIG9506			
RF segnale in uscita			
	Frequency	MHz	VHF: 174-446 UHF: 470-862
	Channels		VHF: E5-S38 UHF: E21-E69
	Used Channels	No.	6
	Freq. step	KHz	250
	Max power	dBμV	100
	Level adj.	dB	10 (each channel)
	Trasmission Standards		PAL B/G, D/K, I, N, H, SECAM L, NTSC M
	Modulation		DSB (Double side band)
	Audio type		Stereo
	TV signals mix	MHz	47-862
	insertion loss	dB	2
	Test Signal	dB	Bleck screen with white stripes
Main features			
	Max module No.		Related to frequency and signal levels
	Supply voltage	V	220-240, 50-60
	Programming mode		Software, Keyboard
	Consumption	W	63
	Connectors		Input: 2 x F connectors (input + loop-through) for all the channels 2 x F connector (output and in MIX A/V 3 x RCA connector on each channel
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-10 - +45
	Dimensions	mm	370 x 240 x 150

COMPACT Headend



SIG9708CI

DIGIFLEX Series Trasmodulation from DVB-S to DVB-T

SMATV headend for the reception and distribution of 8 digital satellite channels. Demodulates 8 digital channels and remodulates them into the RF band (47-862MHz). The front panel is removable with a lock to avoid common interface modules or cards being removed. Wall mount or 19" cabinet installation

- Easy to install, included in one box: power supply, 8 QPSK receivers with common interface slot, 8 A/V vestigial sideband modulators, wideband (47-862MHz) with audio stereo, combiner to mix 8 RF channels, final amplifier 98dBμV per channel
- Two A/V input/output connectors are available to connect external devices (DVD players, cameras, etc.)
- Master/slave setting available to share one smart card among several receivers, to decrypt several programs with only one subscription (if allowed by the pay-TV service provider).
- SIG9708CI: each receiver can generate 14 or 18V, 22KHz tone and DiSEqC 1.0, suitable to feed an LNB or control multiswitch output
- WSS signals compatible for the auto-adjustment of the TV video formats
- Heat dissipation by natural convection, no fans required, reducing maintenance costs
- Software available to set the headend using a PC

SIG9708CI		
CodE		283141
Front-end		
Input No.	No.	8
Input frequency	MHz	950-2150
Inoput Level	dBμV	43-84
Freq. band	MHz	36
Freq. step	KHz	1
insertion loss	dB	<4
Remote feeding	V	400 (14/18V)
LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
Demodulator		DVB-S (QPSK) comply to ETS 300421
FEC		Auto
Symbol rate	Msymb	1-45 (comply to SCPC/MCPC)
AFC interval	MHz	-3 - +3
Common interface		PCMCIA (Standard EN50221, TS10169)
Decoder video		MPEG-2 main profile, main level (MP@ML)
Decoder audio		MPEG-2 Layer I e Layer II
Standard color		PAL
Video format		4:3 Adepted 16:9, pan scan, letter box, combinato
Audio Format		Stereo dual sound
Teletext		yes
A/V Outputs		
Video type		Composite
Video level	Vpp-Ohm	1-75
Max audio level	Ohm,mVras	600-600
Audio adj.	dB	10
Frequency band	MHz	20-15000
S/N ratio	dB	54

SIG9708CI
RF segnale in uscita

Frequency	MHz	47-862
Channels		E2-E69
Used Channels	No.	6
Freq. step	KHz	250
Max power	dBμV	98
Level adj.	dB	0-10
Trasmission Standards		PAL B/G Stereo
Modulation		VSB
Audio type		Adjustable
TV signals mix	MHz	47-862
insertion loss	dB	4
Test Signal	dB	Bleck screen with white stripes

Main features

Max module No.		8
Supply voltage	V	220-240, 50-60
Programming mode		TPE (not included)
Consumption	W	130
Connectors		F Female
Conformity		EN50083-2, EN60065, EN50221, ETSI TS101699
operating temperature	°C	-10 - +45
Dimensions	mm	430 x 305 x 200



K120/FM

Serie K120L Single channel amplifier

Channel amplifiers with five resonant circuit.

Excellent selectivity allows the distribution of adjacent channels.

High stability temperature and good discharge resistance

Operating temperature: from -10° to +55°C.

		K120/FM	K120L/.B3	K120L/xxDT
Code		270271	270885	2708xxDT
Frequency	MHz	87.5-108	174-240	470-790
Freq. band	MHz	-	7	8
Channels		FM	E5-E12	E21-E69
Gain	dB	40	45	45
Gain adj.	dB	20	20	20
Selettività (Pa n -2)	dB	40	40	42
Selectivity (Ca n -1)	dB	5	5	10
Selectivity (Cv n +1)	dB	10	10	16
Selectivity (Cv n +2)	dB	44	44	46
Input Return Loss	dB	10	10	10
Output Return Loss	dB	10	10	10
Mix in loss	dB	0.5	0.5	0.2
Mix out loss	dB	0.5	0.5	0.2
Noise figure	dB	5	9	9
Max output level	dBμV	112	120	115
Main features				
Supply voltage	V	12	12	12
Consumption	mA	200	180	200
operating temperature	°C	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32×129×86	32×129×86	32×129×86

K SERIES



KSTT

KS Trasmodulation from DVB-S to DVB-T Series

QPSK-COFDM trasmodulation to receive FTA channels from DVB-S satellite to create Digital MUXES in VHF or UHF band.

All in one solution to receive all programs contained in a DVB-S transponder and create a DTT mux in the VHF or UHF band.

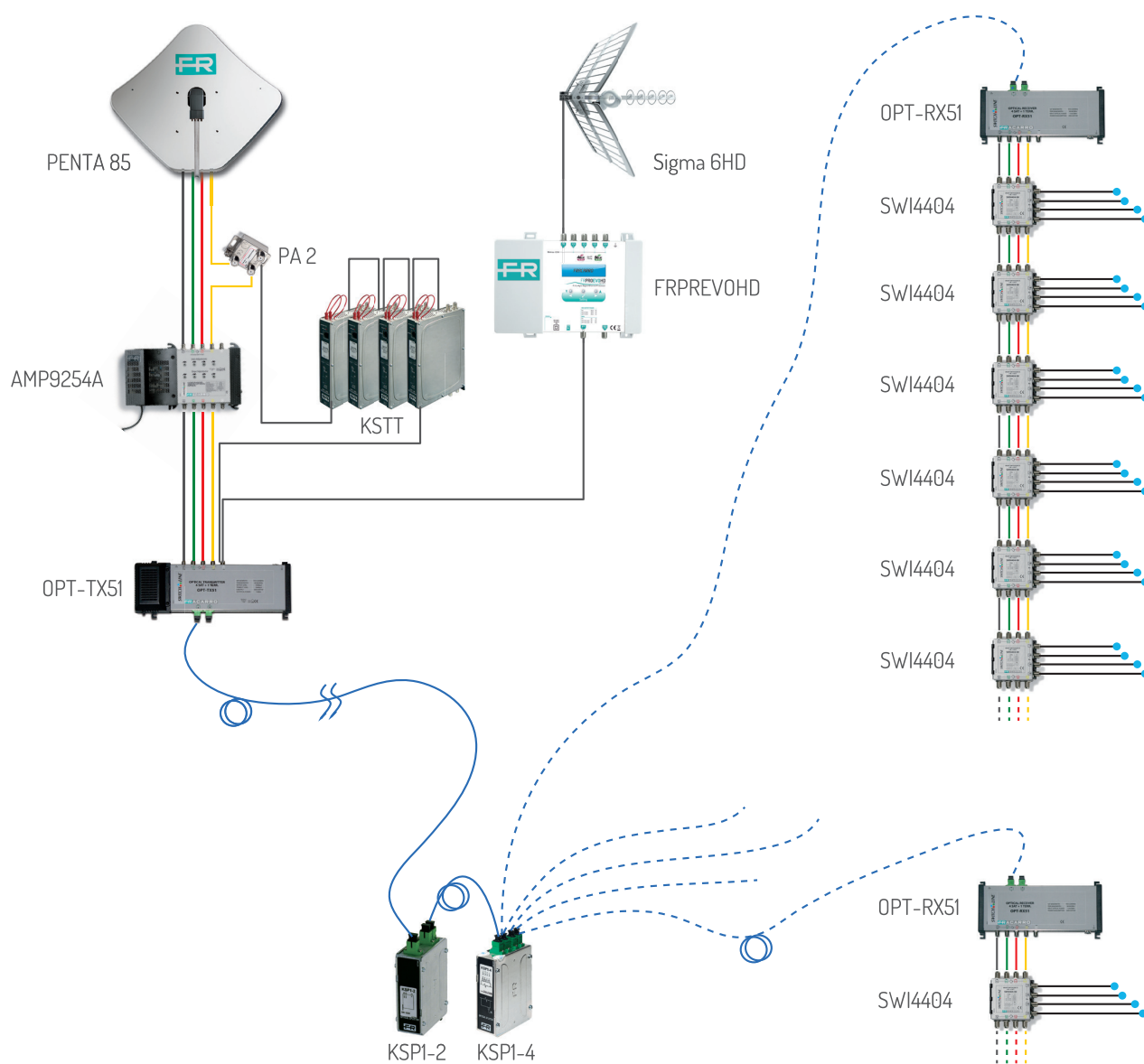
- ARP: automatic recovery procedure to protect the higher priority programs and guarantee continuity of service if bit rate overflow occurs
- Priority management of the programs included in the output multiplex
- LCN settings to adjust the channel number order in all TV sets connected to the headend
- Management and settings of all COFDM parameters
- Event data logger (from TPE or through LED) to highline when a bit-rate overflow occur o or in case of overheating.
- Low current consumption: one KP62 can feed up to 7 KSTT and one K series Amplifier

			KSTT
CodE			270641
Front-end	Input frequency	MHz	950-2150
	Inoput Level	dB μ V	48-85
	Impedance	Ohm	75
	Freq. band	MHz	36
	Freq. step	KHz	1
	insertion loss	dB	1
	Remote feeding	V	400 (14/18V)
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		DVB-S (QPSK)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, auto
	Symbol rate	Msymb	2 - 40
	AFC inteval	MHz	-3 - +3
	Frequency band	MHz	47-2200
	loop through gain	dB	2.5
Output modulation	Output Multiplex	No.	1
	Trasmission Standards		DVB-T
	Freq. band	MHz	6, 7, 8
	Carriers	K	2k, 8k
	Modulation		QPSK, 16-QAM, 64-QAM
	Hierarchy		-
	Guard interval		1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8
	Symbol rate	Msymb	2000/40000
	Spectrum		Normal
RF segnale in uscita	Frequency	MHz	111-862
	Channels		S2-E69
	Freq. step	KHz	10
	Max power	dB μ V	85
	Level adj.	dB	0-15
	Flatness		$\leq \pm 1$
	DTT signal MER	dB	36
	Spurious rejection	dB	>50

Headend

KSTT			
Main features	TV signals mix	MHz	47-862
	insertion loss	dB	1
	Max module No.	Related to frequency and signal levels	
	Supply voltage	V	12
	Programming mode	TPE (not included)	
	Consumption	W	600 (no LNB) 1000 (with LNB)
	Conformity	EN50083-2, EN60065, EN50221, ETSI TS101699	
	operating temperature	°C	-10 - +55
	Dimensions	mm	220 x 150 x 40

Installation example



K SERIES



KDF

KD Series Trasmodulation from DVB-S to analogico

Free-to-air digital satellite receiver equipped with DSB multistandard analogue modulator to distribute signals to all TV's within the installation.

Possible to receive SCPC programs.

Automatic PID updating.

- 75 ohm impedance
- Set up though TPE (code 282733) not included.

KDF		
CodE		282646
Front-end		
Input frequency	MHz	950-2150
Inoput Level	dBuV	45-80
Impedance	Ohm	75
Freq. band	MHz	36
Freq. step	KHz	1
Remote feeding	mA, V	300 12
LNB controls		0/12VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)
Demodulator		DVB-S (QPSK) comply to ETS 300421
FEC		Auto
Symbol rate	Msymb	1-40
AFC interval	MHz	-2.5 - +2.5
Frequency band	MHz	47-862
loop through gain	dB	-4 - +4
Trasmission Standards		PAL (B/G, D/K, I, N, H, M) SECAM L, NTSC M
Modulation		DSB (Double side band)
MPEG Specs		
Decoder video		MPEG-2 ISO-IEC 138 18-1 TS Demux
Decoder audio		MPEG-2 Layer I e Layer II
Standard color		PAL/SECAM/NTSC
Video format		Adepted 16:9, pan scan, letter box
Audio Format		Mono
Teletext		yes
S/N ratio	dB	>52
RF segnale in uscita		
Frequency	MHz	VHF: 174-446 UHF: 470-862
Freq. step	KHz	250
Max power	dBuV	90
Level adj.	dB	0-15
TV signals mix	MHz	47-862
insertion loss	dB	<1.5
Test Signal	dB	Bleck screen with white stripes
Main features		
Supply voltage	V	12
Consumption	W	500 (NO LNB),850 (withLNB)
Conformity		EN50083-2
operating temperature	C°	-10 ÷ +55
Dimensions	mm	180 x 105 x 62



KDSR

KDS Series Trasmodulation from DVB-S to analog.

Digital processors for the reception of free-to-air satellite programs transmitted with QPSK modulation.

The fullband modulator covers the whole 47-862MHz band allowing the distribution of adjacent channels. Ideal for use in condominium and hotel headends where it is necessary to distribute the signal to a high number of sockets.

- Full band modulator 47-862MHz
- LNB power supply, 14/18V 0/22KHz, DiSEqC 1.0
- easy to upgrade thanks to KRS-RJ interface
- RCA connectors with audio/video signal available on all versions
- WSS signals compatible for the auto-adjustment of TV video formats
- Subtitle and teletext management

			KDSR	KDSR-S	KDSR-M
CodE			270624	270623	270622
Front-end					
	Input frequency	MHz	950-2150	950-2150	950-2150
	Input Level	dBμV	43-84	43-84	43-84
	Impedance	Ohm	75	75	75
	Freq. band	MHz	36	36	36
	Freq. step	KHz	1	1	1
	Remote feeding	mA, V	200 14; 100 18	200 14; 100 18	200 14; 100 18
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0	0/14/18VDC, 0/22KHz, DiSEqC 1.0	0/14/18VDC, 0/22KHz, DiSEqC 1.0
	Demodulator		Comply to ETS 300421	Comply to ETS 300421	Comply to ETS 300421
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, auto	1/2, 2/3, 3/4, 5/6, 7/8, auto	1/2, 2/3, 3/4, 5/6, 7/8, auto
	Symbol rate	Msymb	1-40	1-40	1-40
	AFC interval	MHz	±3	±3	±3
	Frequency band	MHz	47-862	47-862	47-862
	loop through gain	dB	-4 - +6	-4 - +6	-4 - +6
	Transmission Standards		PAL B/G	PAL B/G	PAL, D/K, I, N, H, SECAM L, NTSC M
	Modulation		VSF mono	VSF stereo	VSF Mono multistandard
MPEG Specs					
	Decoder video		MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL	PAL	PAL/SECAM/NTSC
	Video format		Adepted 16:9, pan scan, letter box	Adepted 16:9, pan scan, letter box	Adepted 16:9, pan scan, letter box
	Audio Format		Mono, language 1, language 2	Mono stereo dual sound	Mono, language 1, language 2
	Teletext		yes	yes	yes
A/V Output					
	Video type		Composite	Composite	Composite
	Video output level	Vpp - Ohm	1-75	1-75	1-75
	Max audio level	Kohm-Vrms	0-10	0-10	0-10
	Audio adj.	dB	yes	yes	yes
	frequency band	MHz	20-15000	20-15000	20-15000
	S/N ratio	dB	×57	×57	×57

		KDSR	KDSR-S	KDSR-M
RF segnale in uscita				
Frequency	MHz	47-862	47-862	47-862
Channels		S2-E69	S2-E69	S2-E69
Freq. step	KHz	250	250	250
Max power	dB μ V	90	90	90
Level adj.	dB	0-10 via TPE	0-10 via TPE	0-10 via TPE
Audio type		Mono	Mono, stereo	Mono, multistandard
TV signals mix	MHz	47-862	47-862	47-862
insertion loss	dB	<1.5	<1.5	<1.5
Test Signal	dB	Black screen with white stripes and audio	Black screen with white stripes and audio	Black screen with white stripes and audio
Main features				
Max module No.		Related to frequency and signal levels	Related to frequency and signal levels	Related to frequency and signal levels
Supply voltage	V	12	12	12
Programming mode		TPE (not included)	TPE (not included)	TPE (not included)
Consumption	W	1010(with LNB) 730 (No LNB)	1060(with LNB) 780(No LNB)	1010(with LNB) 730 (No LNB)
Conformity		EN50083-2	EN50083-2	EN50083-2
operating temperature	C°	-10 ÷ +45	-10 ÷ +45	-10 ÷ +45
Dimensions	mm	155 x 40 x 220	155 x 40 x 220	155 x 40 x 220

K SERIES



KMS

KM Series Anlog VSB Modulator

A/V VSB modulators, allow the distribution of adjacent channels on the whole band from 47 to 862MHz, S band included.

Three versions are available PAL mono, PAL Stereo, Multistandard

- High output C/N
- Audio and video input level adj.

			KMTW	KMS	KMM
Code			270633	270631	270632
Input No.			No. 2	1	1
CVideo Input	Impedance	Ohm	75	75	75
	Level adj.	Vpp	1 (0.7-1.2)	1 (0.7-1.2)	1 (0.7-1.2)
	Impedance	Ohm	10	10	10
	Level adj.	Vpp	0.5 (0.5-2.5)	0.5 (0.5-2.5)	0.5 (0.5-2.5)
Standard			PAL B/G mono	PAL B/G Stereo	Multistandard N, H, D, K, I, L
Audio carrier frequency	B/G mono	MHz	5.5	-	-
	B/G stereo	MHz	-	-	-
	Left carrier	MHz	-	5.5	-
	Right carrier	MHz	-	5.74	-
	L	MHz	-	-	6.5
	H	MHz	-	-	6.5
	D	MHz	-	-	6.5
	K	MHz	-	-	-
	I	MHz	-	-	6
	N	MHz	-	-	4.5
Audio/video carrier ratio	N	dB	-	-	10
	H	dB	-	-	14
	I	dB	-	-	14
	D/K	dB	-	-	13
	L	dB	-	-	8
	B/G mono	dB	14	-	-
Modulation 1KHz, 0.5Vrms on audio input	B/G stereo	dB	-	14 (Left carrier) 21 (right carrier)	-
	B/G	KHz	49	49	-
	N (FM)	KHz	-	-	<42
	H	KHz	-	-	44
	I, D/K (FM)	KHz	-	-	>47
Modulation width with 1Vpp on video input	L (AM)	KHz	-	-	80%
	D/K, I, B/G	%	80%	80%	80%
	L	%	-	-	90-97%

			KMTW	KMS	KMM
RF segnale in uscita	Frequency	MHz	47-862	47-862	47-862
	Channels		S2-E69	E2-E69	E2-E69
	Set up	MHz	250	250	250
Transmission Standards			B/G Europe, L France, B Australia	B/G Europe, L France, B Australia	B/G Europe, L France, B Australia
Created Channels			2	1	1
Max input level			dB μ V	90	90
Level adj.			dB	0-15	0-15
insertion loss			dB	<1.5	<1.5
Return loss			dB	-	-
Spurious rejection			dB	<-57	57
S/N ratio			dB	-	-
Channel C/N			dB	>57	>57
C/N channle +3			dB	-	-
C/N 40 MHz			dB	-	-
S/N channel			dB	-	-
S/N with 80 mixed channels			dB	-	-
main features					
Supply voltage		Vac,Hz	-	-	-
Programming mode			TPE (not included)	TPE (not included)	TPE (not included)
Consumption		W	400	500	400
Connectors			2 F connectors (output + in mix)	2 F connectors (output + in mix)	2 F connectors (output + in mix)
Conformity			-	-	-
operating temperature		C°	-10 - +55	-10 - +55	-10 - +55
Dimensions		mm	120 x 97 x 43	120 x 97 x 43	120 x 97 x 43

K SERIES



KX125

KX Satellite amplifier Series

Amplifies satellite IF (950-2150MHz) whilst mixing terrestrial TV frequencies of 47-862MHz. Overcomes the higher losses experienced when distributing SAT IF.

		KX125	KX125NT	KX125E
Code		282104	282105	282106
Frequency	MHz	950-2150 / 47-862	950-2150 / 47-862	950-2150 / 47-862
Gain	dB	38-44	35	38-44
Gain adj.	dB	20	20	20
Slope	dB	6	0	6
Max power	dBμV	125	125	125
Noise figure	dB	6	6	6
Return loss	dB	10	10	10
Main features				
Impedance	Ohm	75	75	75
Consumption	mA	310@12VDC	280@12VDC	310@12VDC
operating temperature	°C	-10 - +55	-10 - +55	-10 - +55
Dimensions	mm	32 x 129 x 86	32 x 129 x 86	32 x 129 x 86

K SERIES



KFT/.

KFT Series transponder amplifier

The KFT module selects and amplifies a DVB-S/S2 transponder between 950 to 2150MHz. The filter uses K series housing with F connectors and is self-mixing both for input and output.

		KFT/.	KFT/..	KFT/...
Code		282614	282615	282616
Frequency	MHz	950-1450	1451-1700	1701-2500
Freq. band	MHz	36	36	36
Gain	dB	18	18	18
Gain adj.	dB	20	20	20
Mix in loss	dB	1	1	1
Mix out loss	dB	1	1	1
Noise figure	dB	9	9	9
Max output level	dBμV	100	100	100
Main features				
Supply voltage	V	12	12	12
Consumption	mA	105	105	105
operating temperature	°C	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32 x 129 x 86	32 x 129 x 86	32 x 129 x 86

K SERIES



KFB5/..

KFT Series transponder amplifier

The KFT module selects and amplifies a DVB-S/S2 transponder between 950 to 2150MHz. The filter uses K series housing with F connectors and is self-mixing both for input and output.

		KFB3	KFB4	KFB5	KFB5/..	KFBU
Code		270063	270054	270055	270062	270064
Frequency	MHz	174-240	470-590	606-862	Special tuning on demand	470-862
Freq. band	MHz	7/8	8	8	8	8
Channels		E5-E12	E21-E35	E38-E69	E38-E69	E38-E69
Gain	dB	30	13	11	11	30
Gain adj.	dB	20	20	20	20	20
Input Return Loss	dB	10	10	10	10	10
Output Return Loss	dB	10	15	15	10	10
Mix out loss	dB	0.5	0.5	0.5	0.5	0.5
Noise figure	dB	5	4	4	5	5
Max output level	dBμV	107	107	107	100	111
Main features						
Supply voltage	V	12	12	12	12	12
Consumption	mA	100	130	130	130	100
operating temperature	°C	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	32x129x86	32x129x86	32x129x86	32x129x86	32x129x86

K SERIES



KW33B

KW wide band amplifier Series

Broadband launch amplifier with pushpull technology allows the amplification of the whole 47-862MHz band, including the S band. With one input and one output, the KW series are used to amplify the signal from KF filters or other modules.

The KW35E passes the return channel (5-30MHz).

- 75 ohm impedance
- Return loss 10dB

			KW33B	KW33C	KW44C	KW20D	KW35D	KW35E
Code			270050	270053	270051	270049	270061	270059
Frequency	MHz		47-862	47-862	47-862	47-862	47-862	5-30 / 47-862
Gain	950-2150 MHz	dB	34	32	44	20	35	35
Gain adj.		dB	20	20	20	20	20	20
Slope		dB	0-20	0-20	0-20	0-20	0-20	0-20
Max power		dBμV	116	120	120	125	125	129
Noise figure		dB	8	9	8	6	5	6
main features								
Consumption		mA	300	510	550	550	640	830
operating temperature		°C	-10 - +55	-10 - +55	-10 - +55	-10 - +55	-10 - +55	-10 - +55
Dimensions		mm	32 x 129 x 86	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107	63 x 184 x 107

K SERIES



KP15

KP Series Switching power supply

The power supply units contain switching technology to ensure the best performance and reliability. Operating temperature: -10°C to +55°C.

		KP15	KP35	KP62
Code		270018	270017	270019
Supply voltage	V	220-240, 50-60	220-230, 50-60	220-240, 50-60
Consumption	W	23	55	88
Max current	mA	1500	3500	6200
Output voltage	Vdc	12 ± 5%	12 ± 5%	12 ± 5%
Isolation		Class II	Class II	Class II
operating temperature	°C	-10 ÷ +55	-10 ÷ +55	-10 ÷ +55
Dimensions	mm	130 x 40 x 86	165 x 63 x 107	165 x 63 x 107

HEADLINE Series



SIG7531

DVB-T receiver Series

COFDM Digital receiver with A/V RCS output connector and back panel TS to receive DVB-T FTA channels. Single TV input and loop-through output to connect several receiver on the same aerial.

- Easy to upgrade
- Jumper cable KPR41 included.
- Compatible MPEG2 / MPEG4

			SIG7531	SIG7540
CodE			283952	283951
Front-end	Input No.	No.	1	1
	Input frequency	MHz	174 - 230, 470 - 860	174 - 230, 470 - 860
	Inoput Level	dB μ V	30-80	30-80
	Impedance	Ohm	75	75
	Freq. band	MHz	7, 8	7, 8
	Freq. step	KHz	167	167
	Demodulator		DVB-T (QPSK, 16QAM, 64QAM)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	2-30	2-30
	AFC inteval	MHz	± 285 (2k), ± 142 (8k)	± 285 (2k), ± 142 (8k)
	Hierarchi		High/low priority	High/low priority
	Carriers	K	2, 8	2, 8
	Frequency band	MHz	47-862	47-862
	loop through gain	dB	-3 - +2	1
MPEG Specs	Decoder video		MPEG-2 MP@ML	MPEG-2 MP@ML
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes
A/V Outputs	Video type		Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ
	Max audio level	Ohm,mVras	550	550
	Audio adj.	dB	0-10	0-10
	S/N ratio	dB	45	45
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
Main features				
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	4.5	11
	Connectors		2 F female, 3 RCA	RCA female
	Conformity		EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

Headend

			SIG7531	SIG7540
CodE			283952	283951
Front-end	Input No.	No.	1	1
	Input frequency	MHz	174 - 230, 470 - 860	174 - 230, 470 - 860
	Inoput Level	dB μ V	30-80	30-80
	Impedance	Ohm	75	75
	Freq. band	MHz	7, 8	7, 8
	Freq. step	KHz	167	167
	Demodulator		DVB-T (QPSK, 16QAM, 64QAM)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	M symb	2-30	2-30
	AFC interval	MHz	± 285 (2k), ± 142 (8k)	± 285 (2k), ± 142 (8k)
	Hierarchi		High/low priority	High/low priority
	Carriers	K	2, 8	2, 8
	Frequency band	MHz	47-862	47-862
	loop through gain	dB	-3 - +2	1
MPEG Specs	Decoder video		MPEG-2 MP@ML	MPEG-2 MP@ML
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes
A/V Outputs	Video type		Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ
	Max audio level	Ohm,mVras	550	550
	Audio adj.	dB	0-10	0-10
	S/N ratio	dB	45	45
Output TS	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
Main features				
	Max module No.		Related to frequency and signal levels	Related to frequency and signal levels
	Common interface		PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	4.5	11
	Connectors		2 F female, 3 RCA	RCA female
	Conformity		EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

HEADLINE Series



SIG7330

DVB-S receiver Series

The SIG7330 QPSK receivers with audio/video outputs on RCA (cinch connectors to receive free-to-air digital satellite programs.

back Panel output

Loop through to connecto mani receiver on the same dish

- LNB power supply, 14/18V 0/22KHz, DiSEqC 1.0
- Easy to upgrade

			SIG7330	SIG7340	SIG7100
CodE			283954	283955	283949
Front-end	Input No.	No.	1	1	1
	Input frequency	MHz	950-2150	950-2150	950-2150
	Inoput Level	dBμV	48-85	48-85	48-85
	Impedance	Ohm	75	75	75
	Freq. band	MHz	7,8	7,8	7,8
	Freq. step	KHz	1000	1000	1000
	insertion loss	dB	-	-	-
	Remote feeding	V	200 14V; 100 18V	200 14V; 100 18V	200 14V; 100 18V
	LNB controls		0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)	0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)	0/14/18VDC, 0/22KHz, DiSEqC 1.0 (4 posizioni)
	Demodulator		DVB-S (QPSK)	DVB-S (QPSK)	DVB S2 (8-PSK, QPSK), DVB-S (QPSK)
	FEC		1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb	2-40	2-40	2-40 (DVB-S), 2-30 (DVB-S2)
	AFC interval	MHz	±5	±5	±5
	Hierarchi		High/low priority	High/low priority	High/low priority
	Carriers	K	-	-	-
	Frequency band	MHz	950-2150	950-2150	950-2150
	loop through gain	dB	-2	-2	-2
Input TS	Connectors		48 PIN connector	48 PIN connector	-
	Type		8bit parallel	8bit parallel	-
	Max Bitrate	Mbit/s	100	100	-
MPEG Specs	Decoder video		MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)	MPEG-2 main profile, main level (MP@ML)
	Decoder audio		MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II	MPEG-2 Layer I e Layer II
	Standard color		PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M	PAL, PAL-N, SECAM-L, NTSC-M, PAL-M
	Video format		Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato	Adepted 16:9, pan scan, letter box, combinato
	Audio Format		Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo	Mono, language 1, language 2, stereo
	Teletext		yes	yes	yes

Headend

		SIG7330	SIG7340	SIG7100
A/V Outputs	Video type	Composite	Composite	Composite
	Video level	Vpp-Ohm	1 typ - 75	1 typ - 75
	Max audio level	Ohm,mVras	550	550
	Audio adj.	dB	0-10	0-10
	Frequency band	MHz	20-15000	20-15000
	S/N ratio	dB	45	45
Output TS	Connectors	Back Panel 48 pin	Back Panel 48 pin	Back Panel 48 pin
	Type	Parallel	Parallel	8bit parallel
Main features				
	Max module No.	Related to frequency and signal levels	Related to frequency and signal levels	Related to frequency and signal levels
	Common interface	PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)	PCMCIA (EN50221, TS101699)
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode	TPE	TPE	TPE
	Consumption	W	11	11
	Connectors	RCA female	RCA female	RCA female
	Conformity	EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05	EN60065: 2004-06, EN50083-2: 2002-05
	operating temperature	C°	-5 - +45	-10 - +45
	Dimensions	mm	35.5(7e) x 130(3U) x 240	35.5(7e) x 133(3U) x 240
	Weight	Kg	-	-

HEADLINE Series



SIG7282

Analog modulator Series

Audio video modulators, double conversion, double saw filter and tracking filter built in. One modulator covers the whole 47-862MHz band and a very high C/N ratio in the band allows the distribution of more than 80 channels. Available in PAL B/G mono (SIG7282), PAL B/G stereo (SIG7282S) and multistandard SIG7281).

- Fully agile output modulators, with double conversion, saw filter and tracking filter built in. Using only one modulator, the whole 47-862MHz band can be covered, simplifying the installation and maintenance of the system.
- High output level, 95dBu, to perfectly mix up to 80 channels.
- RCA (cinch) connectors for audio and video input, F connectors for RF output
- RCA 70 cm cable and KPR41 jumper included

			SIG7282	SIG7282S	SIG7281
Code			283943	283944	283933
Input No.	No.		-	-	-
CVideo Input	Impedance	Ohm	75	75	75
	Level adj.	Vpp	0.7-1.4	0.7-1.4	0.7-1.4
	Impedance	Ohm	10	10	10
	Level adj.	Vpp	0.5-3.5	0.5-3.5	0.5-2
Standard			PAL B/G mono Mono	PAL B/G Stereo Mono, stereo, dual sound	Multistandard N, H, D/K, I, L
Audio carrier frequency	B/G mono	MHz	5.5	5.5	-
	B/G stereo	MHz	-	-	-
	Left carrier	MHz	-	-	-
	Right carrier	MHz	-	5.74	-
	L	MHz	-	-	6.5
	H	MHz	-	-	5.5
	D	MHz	-	-	6.5
	K	MHz	-	-	6.5
	I	MHz	-	-	6
	N	MHz	-	-	4.5
Audio/video carrier ratio	N	dB	-	-	10
	H	dB	-	-	14
	I	dB	-	-	14
	D/K	dB	-	-	13
	L	dB	-	-	8
	B/G mono	dB	13	13	-
	B/G stereo	dB	-	20	-
Modulation 1KHz, 0.5Vrms on audio input	B/G	KHz	45	45	49
	N (FM)	KHz	-	-	32
	H	KHz	-	-	>47
	I, D/K (FM)	KHz	-	-	>47
	L (AM)	KHz	-	-	80%
Modulation width with 1Vpp on video input	D/K, I, B/G	%	-	-	-
	L	%	-	-	-

Headend

			SIG7282	SIG7282S	SIG7281
RF segnale in uscita	Frequency	MHz	47-862	47-862	47-862
	Channels		E2-E69	E2-E69	E2-E69
	Set up	MHz	-	-	-
	Trasmission Standards		-	-	-
	Created Channels		-	-	-
	Max input level	dB μ V	95 $\pm$ 2	95 $\pm$ 2	95 $\pm$ 2
	Level adj.	dB	0-15	0-15	0-15
	insertion loss	dB	<1.5	<1.5	<1.5
	Return loss	dB	>10	>10	>10
	Spurious rejection	dB	>60	>60	>54
	S/N ratio	dB	>50	>50	>54
	Channel C/N	dB	-	-	-
	C/N channle +3	dB	>66	>66	>68
	C/N 40 MHz	dB	>70	>70	>75
	S/N channel	dB	50	50	50
	S/N with 80 mixed channels	dB	48	48	48
main features					
Programming mode			TPE	TPE	TPE
Consumption		W	8	8	8
operating temperature		C°	-10 - +45	-10 - +45	-5 - +45
Dimensions		mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240

HEADLINE Series



SIG7120

DVB-T Modulator Series

The SIG7120 modulates a signal (TS) received in the input from the back panel in COFDM DVB-T standard. On the front panel there is an additional F connector for output loop-through feature.

- Integrated LCN
- Possibility to choose the desired COFDM modulation
- Output level adjustment
- High Definition (HD) compliant
- When connected to different receivers (SAT, COFDM, A/V, etc.), different types of transmodulation can be performed
- Compatible MPEG2/MPEG4

			SIG7120	SIG7121
CodE			283950	283953
Input TS	Connectors		48 PIN connector	48 PIN connector
	Type		Parallel	Parallel
	Max Bitrate	Mbit/s	100	100
Input ASI	Connectors		-	BNC, 75 Ohm
	Max Bitrate	Mbit/s	-	216
Output modulation	Output Multiplex	No.	1	1
	Trasmission Standards		DVB-T	DVB-T
	Freq. band	MHz	6, 7, 8	6, 7, 8
	Carriers	K	2k, 8k	2k, 8k
	Modulation		QPSK, 16-QAM, 64-QAM	QPSK, 16-QAM, 64-QAM
	Guard interval		1/4, 1/8, 1/16, 1/32	1/4, 1/8, 1/16, 1/32
	Symbol rate	Msymb	2000/40000	2000/40000
	Spectrum		Normal, inverted	Normal, inverted
	Connectors		Back Panel 48 pin	Back Panel 48 pin
	Type		Parallel	Parallel
RF segnale in uscita	Frequency	MHz	111-862	111-862
	Channels		S2-E69	S2-E69
	Used Channels	No.	1	1
	Freq. step	KHz	10	10
	Max power	dB μ V	85 $\pm$ 2	85 $\pm$ 2
	Level adj.	dB	0-15	0-15
	Flatness		$\leq \pm 1$	$\leq \pm 1$
	DTT signal MER	dB	38	34
	Spurious rejection	dB	>50	>50
	TV signals mix	MHz	47-862	47-862
	insertion loss	dB	<1.5	<1.5
	Supply voltage	V	220-240, 50-60	220-240, 50-60
	Programming mode		TPE	TPE
	Consumption	W	10	10
	Connectors		F Female	F Female
	Conformity		EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	C°	-10 - +45	-10 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-	-

HEADLINE Series



SIG7404H



SIG7804H264

Encoder FROM analog/HDMI to ASI Series

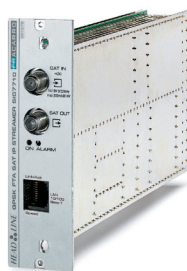
The SIG7404H 19" standard rack format is a Standard Definition Encoder which encode and remux its four Audio/Video composite input sources on DVB-ASI output interface.

Can be connected to an IP encoder to realize multicast streams.

- Codify and multiplexing of 4 A/V signals
- Perfect to convert from AV to COFDM (with SIG7121) or from AV to IP
- MPEG 2 coding
- Bit rate 1-15Mbps
- Supported format Full D1, Half D1, SIF, QSIF
- Pal and NTSC format

SIG7404H			SIG7804H264	
Code		287348		287430
Input	No.		4 x CVBS	4 x HDMI (recipiente tripla A)
Input	Video connector		RCA	Conforme con HDMI 1.3a
Input	Video impedance	Ohm	75	-
Input	Audio connector		RCA (left, right audio channels)	HDMI
Input	Audio impedance	KOhm	10	-
ASi output	Output no.		1 x BNC	1 x BNC
ASi output	Impedance	Ohm	75	75
ASi output	Standard		DVB-ASI	DVB-ASI
ASi output	Max output bitrate	Mbps	108	2016
Coding				
Video resolution		576i/480i		1080p@60Hz
Video compression		MPEG-2 Video(ISO/IEC 13818-2) MPEG-2 MP@ML		H264/AVC
Audio compression		MPEG-1 Audio Layer II (ISO/IEC 11172-3)		MPEG-1 Audio Layer II (ISO/IEC 11172-3)
Audio coding ratio		128, 256, 384		128, 256, 384
Advanced set up				
PID settings		PMT/Video/Audio/PCR		PMT/Video/Audio/PCR
Network set up TS		NID/ONID/P.D.S./TS ID		NID/ONID/P.D.S./TS ID
LCN set up		1023		1023
main features				
Supply voltage		Vac,Hz	110-240, 50-60	110-240, 50-60
Consumption		W	25	40
Connectors		BNC (ASI Out), RCA (A/V), RJ45 (built-in WEB interface set up)		BNC (ASI Out), HDMI1.3a (segnale video e audio), RJ45 (settaggi tramite interfaccia WEB built-in)
Conformity		EN50083-2, EN60065		EN50083-2, EN60065
operating temperature		C°	0 - +45	0 - +45
Mounting		19" rack		19 pollici standard montato in Rack
Dimensions		mm	440 x 44 x 280	440 x 44 x 280

HEADLINE Series



SIG7710

Encoder from DVB-T/S (Free to air) to IP Series

The encoders work as a DVB-S (SIG7710) and DVB-T (SIG7730) to IP gateway. Satellite and Digital Terrestrial Television signals are received on the F connector input, converted to IP standard signals and streamed through RJ45 output port into LAN.

services and programs can be distributed both as unicast and multicast.

- From the user side, the programs and services can be viewed using an IP set top box (STB) on TV devices or using dedicated software on PC.
- Loop-through (active/passive) input allows easy management of the headend

		SIG7710	SIG7730
Code		283945	283946
Front-end	Input No.	No. 1	1
	Input frequency	MHz 950-2150	174-230/470-862
	Input Level	dBμV 40-84	30-80
	Impedance	Ohm 75	75
	Freq. band	MHz 7,8	7,8
	Freq. step	KHz 1000	166.7
	insertion loss	dB -	-
	Remote feeding	mA 200 14; 100 18	201 14; 100 18
	LNB controls	0/14/18, 0/22, 200 DISEqC 1.0	0/14/18, 0/22, 200 DISEqC 1.0
	Demodulator	DVB-S (QPSK)	DVB-T (QPSK, 16QAM, 64QAM)
	FEC	1/2, 2/3, 3/4, 5/6, 7/8, AUTO	1/2, 2/3, 3/4, 5/6, 7/8, AUTO
	Symbol rate	Msymb 1-40	2-35
	AFC interval	MHz ±3	±285 (2k), ±142 (8k)
	Hierarchy	High/low priority	High/low priority
	Carriers	K 2, 8	2, 8
	Frequency band	MHz 950-2150	174-230, 470-862
	loop through gain	dB 0.8, -1.7	2 (on), -0.5 (off)
Output modulation	Trasmission Standards	MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT	MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT
LAN	Interface	IEEE 802.3 100BaseT	IEEE 802.3 100BaseT
	Incapsulation	ETSI TS102034	ETSI TS102034
	Streaming type	Multicast/unicast	Multicast/unicast
	Web services	DVB incapsulation, http, TELNET, FTP, SAP	DVB incapsulation, http, TELNET, FTP, SAP
Main features			
	Max module No.	Related to frequency and signal levels	Related to frequency and signal levels
	Common interface	-	-
	Supply voltage	V 220-240, 50-60	220-240, 50-60
	Programming mode	TPE, PC	TPE, PC
	Consumption	W 11	8
	Connectors	2 F, RJ45	2 F, RJ45
	Conformity	EN50083-2, EN60065	EN50083-2, EN60065
	operating temperature	°C -10 ÷ +45	-5 ÷ +45
	Dimensions	mm 35.5(7e) x 133.3(3U) x 240	35.5(7e) x 133.3(3U) x 240
	Weight	Kg -	-

HEADLINE Series



SIG7720

Encoder from TS (Transport stream) to IP Sereis

The SIG7720 encoder works from Transport Stream (TS) to IP gateway. Signals are received from the back-panel, converted to IP standard signals and streamed through RJ45 output port into LAN. Input signal can be received from either SIG7100 module (DVB-S2 to TS) or SIG7540 module (DVB-T to TS).

- Set up of all the receiver thorough web interface

SIG7720			
CodE		283947	
Input TS	Connectors		48 PIN connector
	Type		Parallel
	Max Bitrate	Mbit/s	100
	Trasmission Standards	MPEG2TS on UDP or MPEG2TS on RTP/UDP. Re-build tables PAT, PMT, SDT	
LAN	Inteface		IEEE 802.3 100BaseT
	Incapsulation		ETSI TS102034
	Streaming type		Multicast/unicast
	Web services		DVB incapsulation, http, TELNET, FTP, SAP
Main features			
	Supply voltage	V	220-240, 50-60
	Programming mode		TPE, PC
	Consumption	W	8
	Connectors		RJ45
	Conformity		EN50083-2, EN60065
	operating temperature	C°	-5 - +45
	Dimensions	mm	35.5(7e) x 133.3(3U) x 240
	Weight	Kg	-

HEADLINE Series



SIG7600-HTX

Head line optical transmitter Sereis

Head line optical transmitter convert the RF signal from 47-2150 into an optical signal
1310 nm laser with 13 mW (11dBm) optical power.

Optical signal can be splitted several times

5 different LEDs to che del muduleoperating functions

- High optical power
- High Definition (HD) compliant
- High S/N ratio

SIG7600-HTX		
Code		270678
RF inputs		1 TV + 1 SAT
Optical output		1 SC/APC
SAT Inputs		
Frequency band	MHz	950-2150
Connectors type		F female
Return loss	dB	10
Input Level	dBμV	96
TV Input		
Frequency band	MHz	87-862
Connectors type		F female
Return loss	dB	10
Input Level	dBμV	96
Optical output		
Connectors type		SC/APC
Wavelength		1310±20
Optical power	dB	11
Optical return loss	dBμV	>45
Safety level		3A
main features		
Supply voltage	Vac/Hz	220-240, 50-60
Consumption	W	4
Operating temperature	°C	-10 - +45
LEDs	dBμV	Power status green
Standards		CEI EN 50083-2 EN60065
Dimensions	mm	170x285x70

Headend

HEADLINE Series



SIG7622

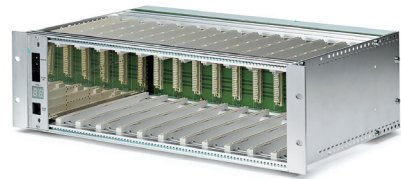
SPLITTER series

Optical splitters that split the optical signal into two outputs (SIG7622) and four outputs (SIG7624). Splits all the optical signals on all outputs

- Low insertion loss
- High Definition (HD) compliant

		SIG7622	SIG7624
Code		270687	270688
Inputs	No.	1	1
Outputs	No.	2	4
Connectors type	Type	SC/APC	SC/APC
Wavelength	nm	1290-1600	1290-1600
Insertion loss	dB	3.2	6.4
Return loss	dB	>55	>55
Isolation	dB	>45	>45
Operating temperature	°C	-20 - +55	-20 - +55
Standards		CEI EN 60825-1 CEI EN 60825-2	-
Dimensions	mm	32x129x86	32x129x86

HEADLINE Series



SIG7901

SUB Rack Series

19" Sub-rack ti fit up to eleven Head line module.
Interconnection module to power and address the headline modules.
The interconnection module is installed in sub-rack SIG7901 or SIG7902.

Item	Code	Description	Packa- ging
SIG7901	283930	Interconnection module to power and address the headline modules. SIG7900 included on the packing All the accessorie are included inthe packing	1

HEADLINE Series



TPE - Code 282733



FHM - Code 289888



KRS-RJ - Code 282732

TPE programming unit

Enables the programming of all new K Series modules, DIGIFLEX, Headline range and K Series modules.

- USB drivers available for PC connection
- Language menu available: Italian, English, German, French, Spanish and Portuguese
- Max. addressable modules: 253
- Copy function available, to copy the settings from one device to another
- Adjustable contrast (31 steps), Display: LCD graphic backlit display, 16x4 characters
- 18 button keypad

FHM and USB-RJ45 adapter

Management Software and USB-RJ45 adapter suitable for K Series, SAF, SIG9708CI, HEADLine

- Using FHM the critical parameters of connected modules can be viewed locally or remotely
- For user defined parameters an upper and lower alarm limit can be set

RACK



RACK42U



RACK6U

RACK Series

The range includes two floor standing cabinets and one wall mounted cabinet, with accessories, to be used to install SMATV headends for K Series and Headline. The cabinets and accessories are available on request with a delivery time of 20 days from order. All the products are packaged individually.

Item	Code	TPE	Description	Pack.
RACK42U	289722		19" wall mounted cabinet. Tempered glazed door that can be rotated 180°.The 19" uprights are adjustable according to the depth of the equipment to be installed.Two apertures for power cables at floor level or at the top where a ventilation kit can be fitted.	1
RACK27U	289721		19" wall mounted cabinet. Tempered glazed door that can be rotated 180°.The 19" uprights are adjustable according to the depth of the equipment to be installed.Two apertures for power cables at floor level or at the top where a ventilation kit can be fitted.	1
RACK6U	289720		19" floor standing cabinet. Tempered glazed door. All side and rear cabinet panels can be disassembled for easy installation of equipment. The 19" uprights are adjustable according to the depth of the equipment to be installed. Two apertures for feeding cables into the unit at floor level or at the top where a ventilation kit	1

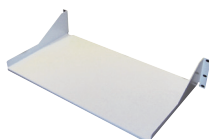
Rack accessories



RACK01



RACK04



RACK06



RACK08



RACK11



RACK12

Item	Code	Description
RACK01	289708	Set of 50 M6 cage nuts and 50 screws.
RACK02	289709	Leveling feet
RACK03	289710	Set of 4 levelling feet
RACK04	289711	1U cable inlet panel
RACK05	289712	3U blank panel
RACK06	289713	19" shelf - 250mm
RACK07	289714	1U blank panel
RACK08	289715	2U, 150mm recessed panel
RACK09	289716	4U, 150mm recessed panel
RACK10	289717	2 fan units with steel grid. Recommended for RACK27U
RACK11	289718	3 fan units with steel grid and thermostat. Recommended for RACK42U
RACK12	289719	Power duct with 5 universal sockets with magneto-thermal switch (4.5kA)

Optical fibre

HOME FIBRE

OPT TX Series	103
OPT-RX series	104
OPT RX SCD2 series	105
Vov series	106

Fibre accessories

Optical fiber cable series	106
Fibre accessories	107

Fibre accessories

Optical fiber cable series	107
KTX Series	108
KRX Series	108
KSPI Series	109
PLC Series	109

SPLITTER

WDM Series	110
------------	-----

OPT series

OPT-TX51 Series	110
OPT-RX51 Series	111
OPT-TX DATA Series	112
Serie OPT-RX DATA	112

BOX FIBRA

Serie BOX	113
-----------	-----

HOME FIBRE



OPT-TX DT

OPT TX Series

The fiber optic system has been designed to distribute easily content as Analogue FM radio and DAB, DVB/T signals, DVB/S-S2 from the headends to the optical receivers. The system works with standard LNB and many different dishes size thanks to the built in AGC distributing the signals on a 9/125 optical fibre. Additional transmitter can be connected in a cascable mode to enlarge the system with a traditional 5 coax trunk line.

- Standard HVHV INB
- AGC on transmitters allow the use of different dish dimensions
- Cascadable solution
- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path
- Built in power supply

		OPT-TX DT	OPT-TX 1510	OPT-TX 1530	OPT-TX 1550	OPT-TX 1570
Code		270694	270667	270668	270669	270670
RF inputs		5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)	5 (4 SAT + 1 TV)
RF outputs		7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)	7 (4 SAT + 1 TV + 2 TEST)
Optical output		1 SC/APC	1 SC/APC	1 SC/APC	1 SC/APC	1 SC/APC
SAT Inputs						
Frequency band	MHz	950-2150	950-2150	950-2150	950-2150	950-2150
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Trunk line loss	dB	<2	<2	<2	<2	<2
Input Level	dBμV	69-86	69-86	69-86	69-86	69-86
TV Input						
Frequency band	MHz	87-862	87-862	87-862	87-862	87-862
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Trunk line loss	dB	1	1	1	1	1
Input Level	dBμV	80 @10 ch	80 @10 ch	80 @10 ch	80 @10 ch	80 @10 ch
Output test						
Frequency band	MHz	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150	87-862 / 950-2150
Connectors type		F female	F female	F female	F female	F female
Return loss	dB	10	10	10	10	10
Test attenuation	dBμV	59 per channel	59 per channel	59 per channel	59 per channel	59 per channel
Optical output						
Connectors type		SC/APC	SC/APC	SC/APC	SC/APC	SC/APC
Wavelength		1310	1510	1530	1550	1570
Optical power	dB	7.5	6.5	6.5	6.5	6.5
Optical return loss	dBμV	>45	>45	>45	>45	>45
Safety level		1M	1M	1M	1M	1M
main features						
Remote feeding	mA, V	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)	200, 14 (4 SAT connectors)
Operating temperature	°C	-5 - +55	-5 - +55	-5 - +55	-5 - +55	-5 - +55
CAG dynamics	dB	20	20	20	20	20
LEDs	dBμV	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent	Red laser overcurrent
Standards		CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065
Dimensions	mm	230x230x50	230x230x50	230x230x50	230x230x50	230x230x50

Optical fibre

HOME FIBRE

OPT-RX series

Home fibre optical receiver with Quattro (HVHV+TV) outputs, Quad, or SCD2(dCSS)

- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path



OPT RX 4 MINI



OPT RX QUAD MINI



OPT-RX-TV

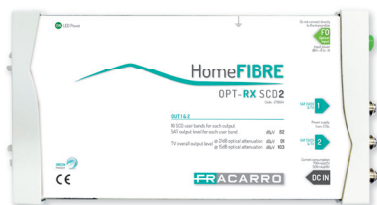
		OPT RX 4 MINI	OPT RX QUAD MINI	OPT-RX-TV
Code		270666	270665	270696
Optical input		1 SC/APC	2 FC/PC	1 FC/PC with SC/APC patchcord
RF outputs		4 SAT (VL,HL,VH,HH)+TV	4 (TV + SAT)	1 TV + 1 SAT
Optical input				
Connector		SC/APC	FC/APC	FC/APC
Wavelength	nm	1290-1600	1290-1600	1290-1600
Optical return loss	dB	>45	>45	>45
Max. Input optical power	dB	-8	-8	-8
RF outputs				
Frequency band	MHz	88-862/950-2150	88-862/950-2150	88-862/950-2150
Connectors type	Type	F female	F female	F female
Return loss	dB	-10	-10	-10
TV output level				
-8dBmo(40Mux)	dBµV	79	81	73
-8dBmo(16Mux)	dBµV	82	84	77
-8dBmo(8Mux)	dBµV	85	87	80
-14dBmo(40Mux)	dBµV	67	69	61
-14dBmo(16Mux)	dBµV	70	72	65
-14dBmo(8Mux)	dBµV	73	75	68
SAT output level				
-8dBmo	dBµV	80	76	78
-14dBmo	dBµV	68	64	66
main features				
Supply voltage	Vac/Hz	-	-	184-264, 50-60
Consumption	W	3.5	3.5	2.5
Current consumption	mA, V	225, 14 175, 18	280, 12 190, 18	-
Voltage	V	14/18 on all outputs	14/18 on all outputs	-
Operating temperature	°C	-5 - +50	-5 - +50	-5 - +50
LEDs	dBµV	Power status green	Power status green	Power status green
Standards		CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065	CEI EN 50083-2 EN60065
Dimensions	mm	160x115x35	160x98x30	120x97x43

HOME FIBRE

OPT RX SCD2 series

Home fibre optical receiver with SCD2(dCSS), Unicable II technology able to serve upto 16 userband per RF output.

- 21 dB optical budget
- Quick and easy installation
- Full terrestrial path



OPT RX SCD2

			OPT RX SCD2	OPT RX SCD2 UK
Code			270664	270663
Optical input			2 FC/PC	2 FC/PC
RF outputs			up to 32 users SCD2 (dCSS) in 2 coax cables	
Optical input				
Connector			FC/APC	FC/APC
Wavelength	nm		1290-1600	1290-1600
Optical return loss	dB		>45	>45
Max. Input optical power	dB		-8	-8
RF outputs				
Frequency band	MHz		88-862/950-2150	88-862/950-2150
SCR frequencies	MHz		-	-
Connectors type	Type		F female	F female
Return loss	dB		-10	-10
TV output level	-8dBmo(40Mux)	dBµV	87	87
	-8dBmo(16Mux)	dBµV	91	91
	-8dBmo(8Mux)	dBµV	94	94
	-14dBmo(40Mux)	dBµV	75	75
	-14dBmo(16Mux)	dBµV	79	79
	-14dBmo(8Mux)	dBµV	82	82
SAT output level	-8dBmo	dBµV	82	82
	-14dBmo	dBµV	82	82
Main features				
Supply voltage	Vac/Hz		-	-
Consumption	W		9	9
Current consumption	mA, V		500, 18 - 750, 12	
Voltage	V		14/18 on all outputs	14/18 on all outputs
Operating temperature	°C		-5 - +50	-5 - +50
LEDs	dBµV		Power status green	Power status green
Standards			CEI EN 50083-2	CEI EN 50083-2
Dimensions	mm		250x140x50	250x140x50

Installation example



Optical fibre

SPLITTER

Vov series

Miniaturize optical splitter to be used on small dimension installation boxes.

- 3mm connector
- Cap to protect the fiber ferrule
- Compact splitter and taps
- Tree or star distribution
- Quick and easy installation
- Wavelength from 1260 to 1590nm
- Operating temperature from - 20° to 55°
- Dimensions 83x59x17 mm



VOV2



VOV4

		VOV2		VOV4	
Code		287210		287211	
Inputs	No.	1		1	
Outputs	No.	2		4	
Wavelength	nm	1290-1600		1290-1600	
Insertion loss	dB	<3.9		<7.8	
Return loss	dB	>55		>55	
Isolation	dB	>45		>45	
		VOT1/2		VOT2/3	
Code		287215		287216	
Inputs	No.	1		1	
Outputs	No.	1+4 der		1+4 der	
Wavelength	nm	1290-1600		1290-1600	
Insertion loss	dB	<2.5		<3.1	
Tap loss	dB	<15		<13.7	
Return loss	dB	>55		>55	
Isolation	dB	>45		>45	
		VOT70/30		VOT80/20	
Code		287212		287213	
Inputs	No.	1		1	
Outputs	No.	1+1 der		1+1 der	
Wavelength	nm	1290-1600		1290-1600	
Insertion loss	dB	<2.1		<1.5	
Tap loss	dB	<6.4		<8.5	
Return loss	dB	>55		>55	
Isolation	dB	>45		>45	
		VOT90/10			
Code		287214			
Inputs	No.	1			
Outputs	No.	1+1 der			
Wavelength	nm	1290-1600			
Insertion loss	dB	<2.1			
Tap loss	dB	<6.4			
Return loss	dB	>55			
Isolation	dB	>45			

Fibre accessories

Optical fiber cable series

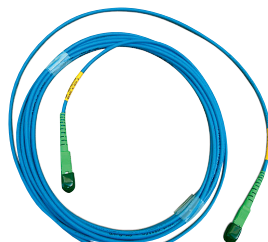


PR003

Item	Code	Description	Type	Length (m)	Con- nector	Pcs
PR003	287219	Preterminated single mode fibre	9/125	3	Mini-Mini	1
PR005	287220	Preterminated single mode fibre	9/125	5	Mini-Mini	1
PR010	287221	Preterminated single mode fibre	9/125	10	Mini-Mini	1
PR025	287222	Preterminated single mode fibre	9/125	25	Mini-Mini	1
PR035	287327	Preterminated single mode fibre	9/125	35	Mini-Mini	1
PR050	287328	Preterminated single mode fibre	9/125	50	Mini-Mini	1
PR075	287329	Preterminated single mode fibre	9/125	75	Mini-Mini	1
PR100	287223	Preterminated single mode fibre	9/125	100	Mini-Mini	1
OPC6C96	287451	Outdoor 96 single mode fibre cable with steel armored	96 fibre 9/125	300	Without connector	-
OPCC0L	287452	indoor LSZH 12 single mode fibre cable	12 fibre 9/125	300	Without connector	-
OPCC0L48	287453	indoor LSZH 48 single mode fibre cable	48 fibre 9/125	300	Without connector	-
OPCC0L96	287454	indoor LSZH 96 single mode fibre cable	96 fibre 9/125	300	Without connector	-
4SC/APC CONN	287345	Connecting service OPC 4 ARM	4 Fibre 9/125	-	SC/APC SC/APC	1
8SC/APC CONN	287347	Connecting service OPC 8 ARM	8 Fibre 9/125	-	SC/APC SC/APC	1
BR2-AA	289360	Single mode patch cord	9/125	2	SC/APC SC/APC	1
BR4-AA	289362	Single mode patch cord	9/125	4	SC/APC SC/APC	1
BF0-SC-APC	289349	SC\APC adapter	9/125	-	SC/APC SC/APC	10

Fibre accessories
Optical fiber cable series


OPC 4 ARM



BR2-AA



BFO-SC-APC

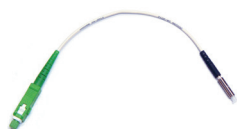
Item	Code	Description	Type	Length (m)
OPC 4 ARM	287344	Outdoor single mode loose tube fibre Glass antirodent protection	4 Fibre 9/125	Specify length
OPC 8 ARM	287346	Outdoor single mode loose tube fibre Glass antirodent protection	8 Fibre 9/125	Specify length
OPC 8 INDOOR	287425	Indoor 8 Fibre loose tube cable	8 Fibre 9/125	500
OPCAB03	287446	Indoor 2 single mode fibre cable LSZH jacket	2 fibre 9/125	1
OPCAB04	287447	Indoor 4 single mode fibre cable LSZH jacket	4 Fibre 9/125	1
OPCGC12	287448	Outdoor 12 single mode fibre cable with steel armored	12 Fibre 9/125	300
OPCGC24	287449	Outdoor 24 single mode fibre cable with steel armored	24 fibre 9/125	300
OPCGC48	287450	Outdoor 48 single mode fibre cable with steel armored	48 fibre 9/125	300
OPCGC96	287451	Outdoor 96 single mode fibre cable with steel armored	96 fibre 9/125	300
OPCCOL	287452	indoor LSZH 12 single mode fibre cable	12 fibre 9/125	300
OPCCOL48	287453	indoor LSZH 48 single mode fibre cable	48 fibre 9/125	300
OPCCOL96	287454	indoor LSZH 96 single mode fibre cable	96 fibre 9/125	300
4SC/APC CONN	287345	Connecting service OPC 4 ARM	4 Fibre 9/125	-
8SC/APC CONN	287347	Connecting service OPC 8 ARM	8 Fibre 9/125	-
BR2-AA	289360	Single mode patch cord	9/125	2
BR4-AA	289362	Single mode patch cord	9/125	4
BFO-SC-APC	289349	SC/APC adapter	9/125	-

Fibre accessories
Fibre accessories


MIN/MIN



OPTATT3DB



PR ADAPT



SUPP VOV/VOT

Item	Code	Description	Pcs
MIN/MIN	287225	MIN-MIN adapter	10
PIG TAIL	287426	900um single mode pigtail	1
FC-SC/APC	280011	Single mode patch cord	1
OPTATT3DB	287239	3dB optical attenuator	1
OPTATT7DB	287238	7dB optical attenuator	1
OPTATT14DB	287237	14dB optical attenuator	1
PR ADAPT	287226	SC/APC - Mini patch cord	1
SUPP VOV/VOT	287240	Wall mount for VOV and VOT	10
PULL_CONN	287224	Pulling connector for Mini	20

Optical fibre

K series

KTX Series

KTX optical transmitter works at 1310nm with a input RF band from 47MHz to 2150MHz

- Supply Voltage
- Power consumption 4W
- Remote feeding 80mA@12V max
- Operating temperature from -10°C to +55°C
- Standard conformity CEI EN 50083-2, EN60065
- Dimensions: 38x89x126mm (KTX); 32x129x86 (KTX-RC)



KTX

		KTX	KTX-RC
Code		270686	270671
RF inputs		1 TV + 1 SAT	Return path
RF outputs		Return path	1 TV + 1 SAT
Optical output		1 SC/APC	1 SC/APC
SAT Inputs			
Frequency band	MHz	950-2150	950-2150
Connectors type		F female	F female
Return loss	dB	10	10
Input Level	dBμV	107	96
TV Input			
Frequency band	MHz	87-862	87-862
Connectors type		F female	F female
Return loss	dB	10	10
Input Level	dBμV	107	107
Optical output			
Connectors type		SC/APC	SC/APC
Wavelength		1310±20	1310±20
Optical power	dB	6	6
Optical return loss	dBμV	>45	>45
Safety level		1M	1M

K series

KRX Series

KRX optical receiver works at 1310nm with a output RF band from 47MHz to 2150MHz SC/APC optical connector

- Supply Voltage
- Power consumption 1,8W
- Operating temperature from -10°C to +55°C
- Standard conformity CEI EN 50083-2, EN60065
- Dimensions: 38x89x126mm (KRX); 32x129x86 (KRX-RC)



KRX

		KRX	KRX-RC
Code		270677	270672
Optical input		1 SC/APC	1 SC/APC
RF inputs		-	1 TV + 1 SAT
RF outputs		1 TV + 1 SAT	Return path
Optical input			
Connector		SC/APC	SC/APC
Wavelength		1290-1600	1290-1600
Optical return loss		>45	>45
Max. Input optical power		6	6
RF outputs			
Frequency band	MHz	88-862/950-2150	5-65
Connectors type		F female	F female
Return loss	dB	-10	-10
TV output level	-0dBmo(40Mux)	dBμV	86
	-0dBmo(16Mux)	dBμV	89
	-0dBmo(8Mux)	dBμV	92

SPLITTER

KSP1 Series

Din rail optical splitter

- Split the optical signal in 2 or 4 ways
- Can be inserted every where in the optical net without any remote feeding



KSPL2

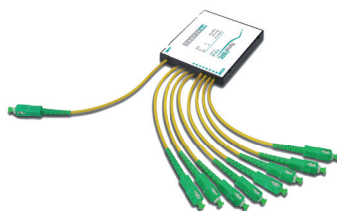
		KSP1_2	KSP1_4
Code		270679	270680
Inputs	No.	1	1
Outputs	No.	2	4
Connectors type	Type	SC/APC	SC/APC
Wavelength	nm	1290-1600	1290-1600
Insertion loss	dB	<3.2	<6.4
Return loss	dB	>55	>55
Isolation	dB	>45	>45
Operating temperature	°C	-20 - +55	-20 - +55
Standards		CEI EN 60825-1 CEI EN 60825-2	CEI EN 60825-1 CEI EN 60825-2
Dimensions	mm	32x189x86	32x189x86

SPLITTER

PLC Series

PLC (planar waveguide) optical splitter allow the distribution of optical signals from 4 to 64 way with low insertion losses.

- Low insertion loss
- High return loss
- Compact design
- SC/APC optical connector



PLC 1x8

		PLC 1x8	PLC 1x16	PLC 1x32	PLC 1x64
Code		287407	287408	287409	287410
Inputs	No.	1	1	1	1
Outputs	No.	8	16	32	64
Connectors type	Type	SC/APC	SC/APC	SC/APC	SC/APC
Wavelength	nm	1260-1650	1260-1650	1260-1650	1260-1650
Insertion loss	dB	<10.1	<13.3	<16.7	<19.9
Return loss	dB	>55	>55	>55	>55
Isolation	dB	>40	>40	>40	>40
Operating temperature	°C	-20 - +55	-20 - +55	-20 - +55	-20 - +55
Dimensions	mm	90x100x20	90x100x21	90x100x22	90x100x23

Optical fibre

SPLITTER

WDM Series

Optical wavelength filters to MUX and DEMUX up to 5 different light "color"

- Color code to select the waveleght
- SC/APC connectors
- Solution for 2 or 5 wavelength
- Quick and easy installation



WDM 2

		CWDM5	WDM 2
Code		287342	287343
Inputs	No.	1	1
Outputs	No.	5	2
Waveleght 1	nm	1510	1290-1350
Waveleght 2	nm	1530	1490-1600
Waveleght 3	nm	1550	-
Waveleght 4	nm	1570	-
Waveleght 5	nm	1310	-
Insertion loss	dB	<1.6	<0.5
Return loss	dB	>55	>55
Flatness	dB	<0.5	<0.5
Isolation	dB	>30	>30
Operating temperature	°C	-20 - +55	-20 - +55
Fibre			
Type		9/125	9/125
Lenght	m	1	1
Jacket		LSZH, G657A1	LSZH, G657A1
Connectors type	Type	SC/APC	SC/APC

OPT series

OPT-TX51 Series

OPT TX 51 convet and distribute 4 SAT polarities and 1 terrestrial path on a single fibre cable thankd to the integrated CWDM MUX

- Cingle optical cable distribution
- Mains supply 184-264V, 50-60Hz 5W max.



OPT-TX51

		OPT-TX51
Code		270689
RF inputs		5 (4 SAT + 1 TV)
Optical output		2 SC/APC
SAT Inputs		
Frequency band	MHz	950-2150
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	117
TV Input		
Frequency band	MHz	87-862
Connectors type		F female
Return loss	dB	10
Input Level	dBµV	117
Optical output		
Connectors type		SC/APC
Wavelength		1510-1530-1550-1570
Optical power	dB	5
Optical return loss	dBµV	>45
Safety level		1M
main features		
Supply voltage	Vac/Hz	184-264, 50-60
Consumption	W	5
Remote feeding	mA	300, 14 (4 SAT connectors)
Operating temperature	°C	-5 - +55
LEDs	dBµV	Power status green
Standards		CEI EN 50083-2 EN60065
Dimensions	mm	425x170x73

OPT series

OPT-RX51 Series

OPT RX 51 convert and distribute 4 SAT polarities and 1 terrestrial path with a single input fibre cable thanks to the integrated CWDM DEMUX SC/APC connectors

- Remote supply on all outputs
14V-240mA



OPT-RX51

		OPT-RX51
Code		270690
Optical input		1 SC/APC
RF outputs		4 (TV + SAT)
Optical input		
Connector		SC/APC
Wavelength		1510-1530-1550-1570
Optical return loss		>45
Max. Input optical power	dBm	5
RF outputs		
Frequency band	MHz	88-862/950-2150
Connectors type	Type	F female
Return loss	dB	-10
TV output level		
-0dBmo(40Mux)	dBμV	88
-0dBmo(16Mux)	dBμV	91
-0dBmo(8Mux)	dBμV	94
-10dBmo(40Mux)	dBμV	68
-10dBmo(16Mux)	dBμV	71
-10dBmo(8Mux)	dBμV	74
SAT output level		
-0dBmo	dBμV	88
-10dBmo	dBμV	68
main features		
Consumption	W	4
Current consumption	mA, V	240, 14V
Remote feeding	mA	-
Voltage	V	14/18 on all outputs
Operating temperature	°C	-5 - +50
LEDs	dBμV	Power status green
Standards		CEI EN 50083-2 EN60066
Dimensions	mm	285x170x73

Optical fibre

HOME FIBRE

OPT-TX DATA Series

Data pon TX is an optical transmitter to distribute data over fibre up to 1.25Gb/sec per user up to 128 point.

- up to 128 ONU
- Max distance 20km
- user band management
- Telnet support
- VLAN protocols and support
- QOS, VID, TOS e MAC address
- IEEE802.3ah Standard conformity



DATA PON TX

DATA PON TX		
Code		287415
LAN Input		-
Optical output		
Connectors type		SC/PC
Porte PON		1000BASE-PX20 (1,25Gbps)
Wavelength	nm	1310 Uplink, 1490 Downlink
Optical power	dBm	From +2 to +7 (1490nm)
Optical return loss	dB μ V	>45
Optical receiver sensitivity	dBm	-
main features		
Supply voltage	Vac, Hz	90-264, 50-60
Consumption	W	16
Operating temperature	°C	0 - +50
Dimensions	mm	440x208x44

HOME FIBRE

Serie OPT-RX DATA

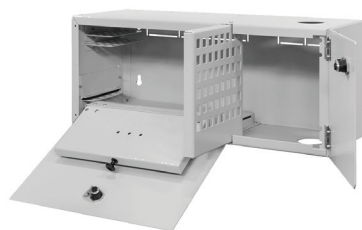
Data PON RX allow the data distribution on a fibre optical network in combination with DATA PON TX

- User bandwidth limitation and controls
- conform to IEEE802.3ah
- up to 20km distance
- 1xGE auto negotiation
- up to 100m on RJ45
- remote firmware upgrade
- EMS network management on SNMP
- Status monitor, configuration management, alarm management



DATA PON RX

		DATA PON RX	DATA PON RX WF
Code		287416	287417
LAN outputs		1 x RJ45	4 x RJ45 + (WiFi IEEE 802.11b/g/h)
Optical input			
Connectors type		SC/PC	SC/PC
Porte PON		1000BASE-PX20 (1,25Gbps)	1000BASE-PX20 (1,25Gbps)
Wavelength	nm	1310 Uplink, 1490 Downlink	1310 Uplink, 1490 Downlink
Optical power	dBm	from +2 to +7 (1310nm)	from +2 to +7 (1310nm)
Optical return loss	dB μ V	>45	>45
Optical receiver sensitivity	dBm	up to -28	up to -28
main features			
Supply voltage	Vac, Hz	12	12
Consumption	W	3	3
Operating temperature	°C	0 - +50	0 - +50
Dimensions	mm	110x70x30	160x120x32,5

BOX FIBRA
Serie BOX


CS0E 2U

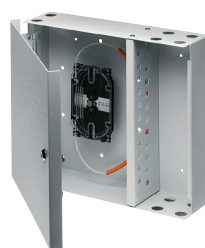


TDT 12

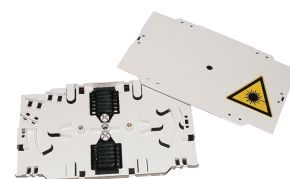
Item	Code	Description	Dimensions
CS0E 2U	287418	Metal wall box to manage up to 48 optical connection. Suitable fo 48 optical connection	454x152x180
TDT 12	287419	IP 66 plastic box to be used as terminal headend Suitable for 12 SC/APC optical connectors Fibre organizer built in	235x205x60
STOA 4	287420	Flat termination box 4SC/APC connectors	100x92x29
OPB18I	289403	Wall metal box suitable for 18 optical connections SC/APC 18 SC/APC	365x320x100
OPB8I	289405	Wall metal box suitable for 18 optical connections SC/APC Suitable for 8 SC/APC connections	160x140x50
OPB24IR	289404	Rack mount box for 24 SC/APC optical connections 24 SC/APC	240x43x223
OP012P	289402	12 position Fiber organizer 12 splicing box	150x95x10
TDT_32	287441	IP 66 plastic box to be used as terminal headend	205x135x55
JTDT_32	287442	protection cover for TDT 32	140x80x40
STOA Preco	2 287443	Flat termination box with 2 fibre preconnectorized 25mt	255x55x260
STOA Preco	4 287440	Flat termination box with 4 fibre preconnectorized 25mt	255x55x260
PMI 24	287444	Metal wall box to manage up to 48 optical connection, completo of 24 pig tail, 2 splicing box Ready for 24 SC/APC optical connection	450x150x150
PMI 48	287445	Metal wall box to manage up to 48 optical connection, completo of 48 pig tail, 4 splicing box Suitable fo 48 optical connection	450x150x150



STOA 4



OPB8I



OP012P

Multiswitch

Compact Multiswitch

5IN COMPACT MULTISWITCH	115
5 INPUTS COMPACT QUAD Serie	116
9 INPUTS COMPACT Serie	117
17 INPUT COMPACT Series	118

MULTISWITCH ACESSORIES

MINI DISEQC Series	119
--------------------	-----

CASCADABLE MULTISWITCH

4 INPUT CASCADABLE Series	120
5 INPUT CASCADABLE Series	121
5 INPUT CASCADABLE PLUS Series	122
5 INPUT CASCADABLE PLUS Series	123
9 INPUT CASCADABLE PLUS Series	124
9 INPUT CASCADABLE Series	125
13 INPUT CASCADABLE Series	126
17 INPUT CASCADABLE Series	127

SCD2 (dCSS) MULTISWITCHES

4 INPUT CASCADABLE SCD2 MULTIOUT Series	128
---	-----

SCD2 (dCSS) MULTISWITCHES

4 INPUT SCD2 COMPACT ADAPTOR Series	129
-------------------------------------	-----

SCD2 (dCSS) MULTISWITCHES

5 INPUT CASCADABLE SCD2 MULTIOUTPUT Series	130
--	-----

SCD2 (dCSS) MULTISWITCHES

SCD2-32IF Series	131
------------------	-----

SCD2 (dCSS) MULTISWITCHES

HEAD AMPLIFIERS

AMPLIFIER Serie	133
-----------------	-----

Line Amplifiers

LINE AMPLIFIER Series	134
LINE AMPLIFIER Series	135

POWER SUPPLY UINIT

POWER SUPPLY UNIT Series	136
POWER SUPPLY UNIT Series	137
POWER SUPPLY UNIT Series	138

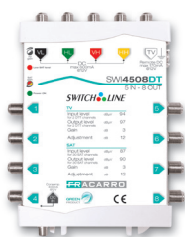
MULTISWITCH ACESSORIES

TAPS AND SPLITTER Series	139
--------------------------	-----

MULTISWITCH ACESSORIES

MULTISWITCH ACCESSORIES Series	139
--------------------------------	-----

Compact Multiswitch



SWI4508DT



4AL828

5IN COMPACT MULTISWITCH

5 inputs compact switches with active gain and TV and SAT separate adjustment

- **Active TV (+3dB) and SAT gain (+3dB)**, to guarantee the same level as the input to the output
- **Separate SAT and TV gain adjustment**
- Satellite band up to 2300MHz
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- **Satellite signal power monitoring LED** (red LED is on when input level is too low)
- Return path included
- Very low consumption thanks to the internal circuit for automatic remote power supply to the SAT and TV lines
- **External power supply included complete with F connector**; to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation

		SWI4508DT	SWI4512DT	SWI4516DT	SWI4524DT	SWI4532DT
Code		271148	271149	271150	271151	271152
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2400	950-2400	950-2400	950-2400	950-2400
Gain	dB	3	3	3	3	3
Gain adjustment	dB	12	12	12	12	12
Maximum output level [-35dBc 2 toni]	dBμV	102	102	102	102	102
SAT-SAT isolation	dB	>25	>25	>25	>25	>25
TV						
Bandwidth	MHz	85-862	85-862	85-862	85-862	85-862
Gain	dB	3	3	-2	-2	-2
Gain adj.	dB	12	12	12	12	12
Maximum output level [-35dBc 2 toni]	dBμV	97	97	97	97	97
Return channel						
Bandwidth	MHz	5-65	5-65	5-65	5-65	5-65
Gain	dB	-8	-8	-13	-13	-13
Power consumption						
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60	220-240, 50-60	220-240, 50-60
Current cons.	mA, V	400, 12	400, 12	400, 12	400, 12	400, 12
Tap consumption	mA	35	35	35	35	35
Maximum LNB current	mA	600	600	600	600	600
Maximum TV amplifier current	mA	170	170	170	170	170
Main features						
Dimensions	mm	145x120x25	200x120x25	260x120x25	340x120x25	420x120x25
PSU dimensions	mm	145x120x70	145x120x70	145x120x70	145x120x70	145x120x70
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

Multiswitch

Compact Multiswitch



SWP508QD



PSU1220JA

5 INPUTS COMPACT QUAD Serie

5 inputs compact switches with TV and SAT active gain and QUAD and quattro LNB compatibility.

- **Active TV (+5dB) and SAT gain (+5dB)**, to guarantee the same level as the input to the output
- Satellite band up to 2300MHz
- **Compatibility with QUAD LNBs (UX-QD LTE)** and QUATTRO (UX-QT LTE) LNBs
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- Very low consumption thanks to the internal circuit for automatic remote power supply to the SAT and TV lines
- **Included external Power Supply with standard Jack connector PSU1220JA**, to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation

		SWP508QD	SWP512QD	SWP516QD
Code		271164	271165	271166
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2400	950-2400	950-2400
Gain	dB	5	5	5
Maximum output level [-35dBc 2 toni]	dBμV	102	102	102
SAT-SAT isolation	dB	>25	>25	>25
TV				
Bandwidth	MHz	85-790	85-790	85-790
Gain	dB	5	0	0
Maximum output level [-35dBc 2 toni]	dBμV	95	95	95
Power consumption				
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Tap consumption	mA	35	35	35
Without LNB	mA, V	300, 12	300, 12	300, 12
With LNB	mA, V	1000, 12	1000, 12	1000, 12
Maximum LNB current	mA	300	300	300
Maximum TV amplifier current	mA	170	170	170
Main features				
Dimensions	mm	145x120x25	200x120x25	260x120x25
PSU dimensions	mm	78x48x35	78x48x35	78x48x35
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Compact Multiswitch



SWP916TS



PSU1315TS

9 INPUTS COMPACT Serie

9 inputs compact switches with dip switch to select active and passive TV gain

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (60m with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports;** only when TV active is enable, it has to be fed by DC-PLUG
- **Standalone included power supply PSU1315TS** (13V, 1,5A) with standard Male Jack connector (2,1x5,5x12; internal positive, external negative) to optimize the installation space and reduce the maintenance time
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWP908TS	SWP912TS	SWP916TS	SWP924TS	SWP932TS
Code		287350	287351	287352	287353	287354
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-2/2	-3/1	-3/1	-5/-1	-7/-2
Maximum output level [-35dBc 2 toni]	dBμV	100	100	100	100	100
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	1	0	-1	-2	-4
Passive gain	dB	-19	-20	-21	-22	-24
Maximum output level [-35dBc 2 toni]	dBμV	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340
Main features						
Dimensions	mm	110x190x40	170x190x40	170x190x40	230x190x40	300x190x40
PSU dimensions	mm	90x70x45	90x70x45	90x70x45	90x70x45	90x70x45
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55



SWP1712TS



PSU1340TS

17 INPUT COMPACT Series

17 input multiswitches with active/passive terrestrial path selectable through dip switch.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (60m with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports;** only when TV active is enable, it has to be fed by DC-PLUG
- **External power supply PSU1340TS** (13V, 4A) with male connector(2,1x5,5x12; inner positive, outer negative) **included;** to optimize the installation dimensions.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWP1708TS	SWP1712TS	SWP1716TS	SWP1724TS	SWP1732TS
Code		287355	287356	287357	287358	287359
Inputs		16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1	-7/-3	-8/-4
Maximum output level (-35dBc 2 toni)	dBμV	100	100	100	100	100
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	0	-1	-2	-3	-5
Passive gain	dB	-20	-21	-22	-23	-25
Maximum output level (-35dBc 2 toni)	dBμV	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95	TV active gain: 95
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features						
Dimensions	mm	120x310x40	190x310x40	190x310x40	260x310x40	310x310x40
PSU dimensions	mm	110x52x34	110x52x34	110x52x34	110x52x34	110x52x34
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

MULTISWITCH ACCESSORIES

MINI DISEQC Series

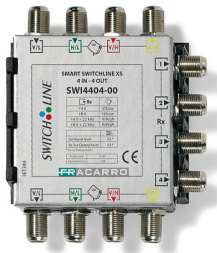
With Mini DiSEqC accessories you can distribute up to 4 satellite and terrestrial path (16 polarities) + TV



SWI1401B

SWI1401B		
Code		271072
Inputs		4 (1 with TV mix)
A Input		SAT, TV
B Input		SAT
C Input		SAT
D Input		SAT
Outputs		1
SAT		
Bandwidth	MHz	950-2150
Insertion loss	dB	-1.5
TV		
Bandwidth	MHz	5-862
Insertion loss	dB	-1.5
Main features		
Current cons.	mA	25
Dimensions	mm	155x55x45
operating temperature	°C	-10÷+55

CASCADABLE MULTISWITCH



SWI4404-00

4 INPUT CASCADABLE Series

Cascadable multiswitches with 4 input with several attenuation on user taps.

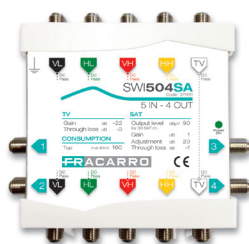
- **3 attenuation levels (-17dB, -8dB, 0dB)** to equalize the distributed signals between floors
- Low insertion loss
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (**70m** with 6,7mm coax.)
- **no power supply required**
- **STBs can feed the LNB also with just one user connected** or the LNB can be feeded through trunk lines.
- Plastic wall mount bracket
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI4404-00	SWI4404-08	SWI4404-17
Code		271081	271082	271083
Inputs		4 SAT	4 SAT	4 SAT
Taps		4 SAT	4 SAT	4 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level [-35dBc 2 toni]	dBμV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	90x70x20	90x70x20	90x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55
		SWI4406-00	SWI4406-08	SWI4406-17
Code		271084	271085	271086
Inputs		4 SAT	4 SAT	4 SAT
Taps		6 SAT	6 SAT	6 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level [-35dBc 2 toni]	dBμV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	119x70x20	119x70x20	119x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55
		SWI4408-00	SWI4408-08	SWI4408-17
Code		271087	271088	271089
Inputs		4 SAT	4 SAT	4 SAT
Taps		8 SAT	8 SAT	8 SAT
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	0	-8	-17
Maximum output level [-35dBc 2 toni]	dBμV	105	105	-
Insertion loss	dB	-2	-2	-2
SAT-SAT isolation	dB	>28	>28	>28
Tap consumption	mA	35	35	15
Dimensions	mm	150x70x20	150x70x20	150x70x20
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH

5 INPUT CASCADABLE Series

5 input cascadable multiswitches with passive terrestrial and active adjustable satellite.



SWI504SA

- **Active satellite** (1dB) to keep the same input signal level on outputs, **passive TV**
- **Satellite gain adj** (0-20dB) to equalize the distribution between floors.
- Satellite band up to 2300MHz
- High Isolation (30dB)
- **Low insertion loss**, allow the signal distribution up to 6 floor without any middle amplification.
- **Very high SAT output level** to run long cable drop with the correct signal power at the STBs (70m with 6,7mm coax.)
- Return path included
- **no power supply required**
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI504SA	SWI506SA	SWI508SA
Code		271161	271162	271163
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		4	6	8
SAT				
Bandwidth	MHz	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/1	-4/1	-4/1
Gain adjustment	dB	20	20	20
Insertion loss	dB	-1	-1	-1
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	88-790	88-790	88-790
Gain	dB	-22	-22	-23
Insertion loss	dB	-3	-3	-3
Power consumption				
Tap consumption	mA	160	170	180
Max current on SAT Line	mA	2000	2000	2000
Max current on TV line	mA	1000	1000	1000
Main features				
Dimensions	mm	120x120x30	140x120x30	160x120x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SWI8508PLUS



SWM1305A

5 INPUT CASCADABLE PLUS Series

Cascadable 5 input multiswitches with active SAT and terrestrial and separate adjustment (sat High and low bandwidth with separate adj.).

- **TV Gain adjustment**
- **2 gain adjustment for high band and low band**
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable length (100m with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- With Mini DiSEqC accessories you can distribute up to 4 satellite and terrestrial path (16 polarities) + TV
- Standard colour coding for an easy installation

		SWI8508PLUS	SWI8512PLUS	SWI8516PLUS
Code		271055	271056	271063
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Positive slope gain	dB	-5\ -1	-4\ 0	-3\ 1
Gain adjustment	dB	15	15	15
Maximum output level [-35dBc 2 toni]	dBμV	110	110	108
Insertion loss	dB	-1.5	-2	-2.5
SAT-SAT isolation	dB	>45	>45	>45
TV				
Bandwidth	MHz	85-862	85-862	85-862
Positive slope gain	dB	-5\ -1	-7\ -3	-9\ -5
Gain adj.	dB	20	20	20
Maximum output level [-35dBc 2 toni]	dBμV	107	105	102
Insertion loss	dB	-1	-1.5	-2
Return channel				
Bandwidth	MHz	5-65	5-65	5-65
Gain	dB	-4	-5	-6
Maximum output level [-35dBc 2 toni]	dBμV	100	100	100
Insertion loss	dB	-1	-1	-1
Main features				
Current cons.	mA, V	280, 14 220, 18	280, 14 220, 18	280, 14 220, 18
Dimensions	mm	260x120x30	340x120x30	425x120x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SWI8524STPLUS

5 INPUT CASCADABLE PLUS Series

5 inputs cascable multiswitches with active gain and separate adj. on stellite and terrestrial (sat High and low badwidth with separate adj.).

Coupled chassis.

- TVGain adjustment
- 2 gain adjutmentfor high band and low band
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable leght (100m with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- Standard colour coding for an easy installation

		SWI8524STPLUS	SWI8532STPLUS
Code		271057	271058
Inputs		4 SAT, 1 TV	4 SAT, 1 TV
Taps		24	32
SAT			
Bandwidth	MHz	950-2150	950-2150
Positive slope gain	dB	-6\0	-5\1
Gain adjustment	dB	15	15
Maximum output level [-35dBc 2 toni]	dBμV	110	108
Insertion loss	dB	-4	-5
SAT-SAT isolation	dB	>45	>45
TV			
Bandwidth	MHz	85-862	85-862
Positive slope gain	dB	-9\ -3	-11\ -5
Gain adj.	dB	20	20
Maximum output level [-35dBc 2 toni]	dBμV	105	102
Insertion loss	dB	-3	-4
Return channel			
Bandwidth	MHz	5-65	5-65
Gain	dB	-5	-6
Maximum output level [-35dBc 2 toni]	dBμV	100	100
Insertion loss	dB	-2	-2
Main features			
Current cons.	mA, V	560, 14 440, 18	560, 14 440, 18
Dimensions	mm	355x120x60	440x120x60
operating temperature	°C	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SWI8908PLUS

9 INPUT CASCADABLE PLUS Series

9 inputs cascable multiswitches with active gain and separate adj. on stellite and terrestrial (sat High and low badwidth with separate adj.).

- **TVGain adjustment**
- **2 adjustment, one of each satellite**, Satellite A and Satellite B separate
- High Isolation (>45dB)
- Low insertion loss
- **High output level** to cover high cable leght (100m with 6,7mm coax)
- Return path included
- Low power consumption thanks to automatic check of the satellite remote feeding.
- Standard colour coding for an easy installation

		SWI8908PLUS	SWI8912PLUS	SWI8916PLUS
Code		271067	271068	271069
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Positive slope gain	dB	-2\3	-3\2	-5\0
Gain adjustment	dB	15	15	15
Maximum output level [-35dBc 2 toni]	dBμV	110	110	108
Insertion loss	dB	-2	-2.5	-3
SAT-SAT isolation	dB	>45	>45	>45
TV				
Bandwidth	MHz	85-862	85-862	85-862
Positive slope gain	dB	-7\ -3	-9\ -4	-11\ -5
Gain adj.	dB	20	20	20
Maximum output level [-35dBc 2 toni]	dBμV	107	105	102
Insertion loss	dB	-1.5	-2	-2.5
Return channel				
Bandwidth	MHz	5-65	5-65	5-65
Gain	dB	-3	-5	-7
Maximum output level [-35dBc 2 toni]	dBμV	100	100	100
Insertion loss	dB	-1.5	-1.5	-1.5
Main features				
Current cons.	mA, V	350, 14 280, 18	350, 14 280, 18	350, 14 280, 18
Dimensions	mm	260x180x30	340x180x30	425x180x30
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SWI912TS



PSU1315TS

9 INPUT CASCADABLE Series

9 input multiswitches with dip switch for terrestrial active or passive path.

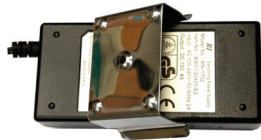
- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (60m with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports;** only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 315TS** (13V, 1,5A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT included;** to optimize installation dimensions.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SWI908TS	SWI912TS	SWI916TS	SWI924TS	SWI932TS
Code		287360	287361	287362	287363	287364
Inputs		8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV	8 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-2/-2	-3/-1	-3/-1	-5/-1	-6/-2
Maximum output level (-35dBc 2 toni)	dBμV	100	100	100	100	100
Insertion loss	dB	-1\ -3	-1\ -4	-1\ -5	-1,5\ -6	-1,5\ 7,5
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4	-5	-6
Passive gain	dB	-22	-23	-24	-25	-26
Maximum output level (-35dBc 2 toni)	dBμV	Active:95	Active:95	Active:95	Active:95	Active:95
Insertion loss	dB	-3\ -4	-3\ -4,5	-3\ -4,5	-3\ -4,5	-3\ -5
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340	Passive TV: 1500 Active TV: 1340
Main features						
Dimensions	mm	110x190x40	170x190x40	170x190x40	230x190x40	300x190x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SW11316TS



PSU1340TS

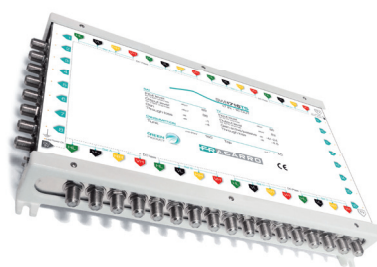
13 INPUT CASCADABLE Series

13 input multiswitches with dip switch for terrestrial active or passive path.

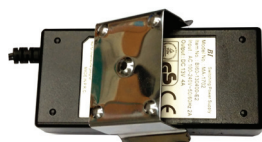
- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (60m with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports;** only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 1304TS** (13V, 4A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT included;** to optimize installation dimensions.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SW11308TS	SW11312TS	SW11316TS
Code		287365	287366	287367
Inputs		12 SAT, 1 TV	12 SAT, 1 TV	12 SAT, 1 TV
Taps		8	12	16
SAT				
Bandwidth	MHz	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1
Maximum output level [-35dBc 2 toni]	dBμV	100	100	100
Insertion loss	dB	-1\ -3	-1\ -4	-1\ -5
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4
Passive gain	dB	-22	-23	-24
Maximum output level [-35dBc 2 toni]	dBμV	Active:95	Active:95	Active:95
Insertion loss	dB	-4\ -5	-4\ -5	-4\ -5
Return channel				
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption				
Tap consumption	mA	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features				
Dimensions	mm	120x310x40	190x310x40	190x310x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

CASCADABLE MULTISWITCH



SW11716TS



PSU1304TS

17 INPUT CASCADABLE Series

17 input multiswitches with dip switch for terrestrial active or passive path.

- **Dip switch to select active and passive TV gain**
- Satellite band up to 2300MHz
- **High SAT output level** to run long cable drop (60m with 6,7mm coax.)
- Each port has a LED which shows the correct reception of the STB DiSEqC command
- Return channel included when TV gain is passive (5-65MHz)
- **When TV gain is passive, the product is entirely fed by tap ports;** only when TV active is enable, it has to be fed by DC-PLUG
- **external power Supply PSU 1304TS** (13V, 4A) Jack Male connector (2,1x5,5x12; inner positive, outer negative) **NOT included;** to optimize installation dimensions.
- Space reduced thanks to the matrix system with both sided connectors
- Standard colour coding for an easy installation
- Excellent quality/price ratio

		SW11708TS	SW11712TS	SW11716TS	SW11724TS	SW11732TS
Code		287368	287369	287370	287371	287372
Inputs		16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV	16 SAT, 1 TV
Taps		8	12	16	24	32
SAT						
Bandwidth	MHz	950-2300	950-2300	950-2300	950-2300	950-2300
Positive slope gain	dB	-4/0	-5/-1	-5/-1	-7/-3	-8/-4
Maximum output level (-35dBc 2 toni)	dBμV	100	100	100	100	100
Insertion loss	dB	-1\ -3	-1\ -4	-1\ -5	-2\ -6.5	-2\ -8
SAT-SAT isolation	dB	>30	>30	>30	>30	>30
TV						
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	-2	-3	-4	-5	-7
Passive gain	dB	-22	-23	-24	-25	-27
Maximum output level (-35dBc 2 toni)	dBμV	Active:95	Active:95	Active:95	Active:95	Active:95
Insertion loss	dB	-4\ -5	-4\ -5	-4\ -5	-4\ -5.5	-4\ -6
Return channel						
Bandwidth	MHz	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65	Passive TV: 5-65
Power consumption						
Tap consumption	mA	50	50	50	50	50
Current cons.	mA, V	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required	Active TV: 160, 13 Passive TV no power supply required
Maximum LNB current	mA	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840	Passive TV: 4000 Active TV: 3840
Main features						
Dimensions	mm	120x310x40	190x310x40	190x310x40	260x310x40	310x310x40
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55	-10÷+55

SCD2 (dCSS) MULTISWITCHES



SCD2-4216

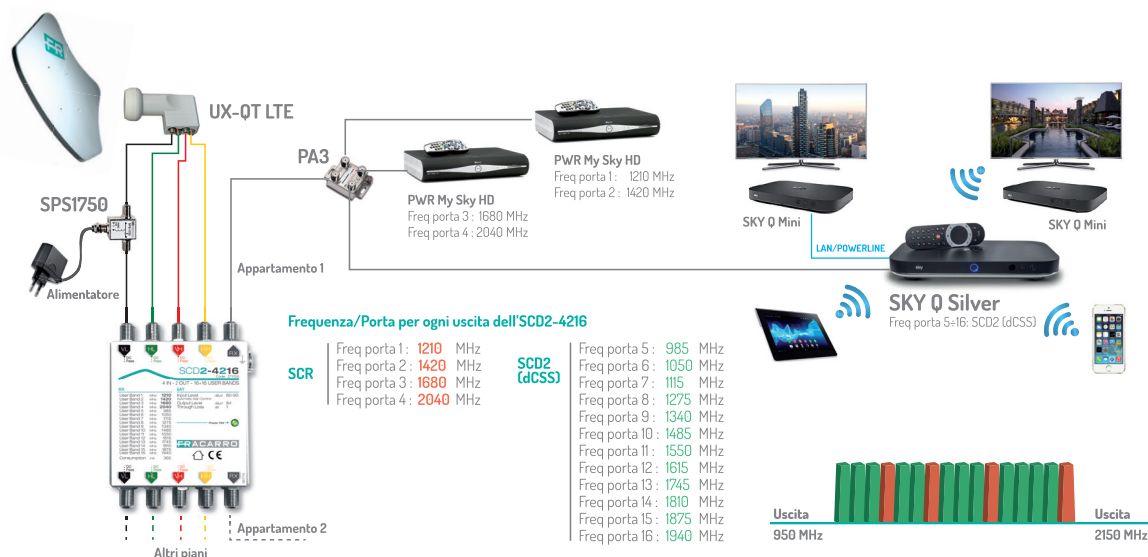
4 INPUT CASCADABLE SCD2 MULTIOUT Series

Cascadable SCD2(dCSS) Swiches , 4 input with AGG and 2 user outputs 16 user band each, fully feeded by STBs.

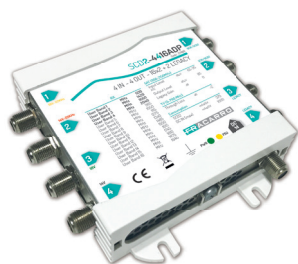
- **4 Inputs, 4 trunk lines and 2 outputs to carry the signals to 2 final user with 16 user band each with just 2 coaxi** (4 SCR tuners and 12 SCD2 dCSS tuners)
- **Automatic Gain Control (AGC):** keep stable the signal levels at the outputs (84dBμV) with an input signals from 60dBμV to 90dBμV.
- **Low insertion loss**, perfect to realize cascable installation or to be installed in an existing multiswitch distribution
- **no power supply required**
- DC Passthrough on all satellite ports
- **Small dimensions**
- Standard colour coding for an easy installation

		SCD2-4216	SCD2-4216UK
Code		271129	271137
Inputs		4 SAT	4 SAT
Taps		up to 32 users SCD2 (dCSS) in 2 coax cables	up to 32 users SCD2 (dCSS) in 2 coax cables
SAT			
Bandwidth	MHz	950-2150	950-2150
Automatic Gain Control	dBμV	60-90	60-90
Maximum output level (-35dBc 2 toni)	dBμV	84	84
Insertion loss	dB	-1	-1
SAT-SAT isolation	dB	>30	>30
Tap			
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply with EN50494 standard) 985, 1050, 1115, 1275 1340, 1485, 1550, 1615 1745, 1810, 1875, 1940 (comply with EN50607 standard)	980, 1030, 1080, 1130 MHz 1280, 1380, 1480, 1530 MHz 1580, 1630, 1680, 1730 MHz 1780, 1830, 1880, 1930 MHz (comply to SKY UK commands)
Power consumption			
Tap consumption	mA	365	365
Maximum LNB current	mA	2000	2000
Main features			
Dimensions	mm	80x105x22	80x105x22
operating temperature	°C	-10÷+55	-10÷+55

Installation example



SCD2 (dCSS) MULTISWITCHES



SCD2-4416ADP

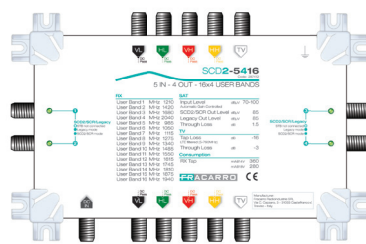
4 INPUT SCD2 COMPACT ADAPTOR Series

Compact multiswitch ADAPTOR SCD2 (dCSS), 4 inputs with AGC, 2 Legacy tap and 2 tap with 16 user band each, remotely feded from the STBs.

- **4 inputs, 2 Legacy taps and 2 SCD2 (dCSS) taps to carry the satellite signals on 16 User Band on each of the 2 coaxi** (4 SCR tuners and 12 SCD2 dCSS tuners on each outputs)
- **Automatic Gain Control (AGC):** keep stable the signal levels at the outputs (84dB μ V) with an input signals from 65dB μ V to 95dB μ V.
- **#b#**perfect to update and existing installation to SCD2 dCSS technology for the new SKY-Q decoder.
- **no power supply required**
- **Small dimensions**
- Standard colour coding for an easy installation

		SCD2-4416ADP	SCD2-4416ADP UK
Code		271169	271168
Inputs		4 SAT+TV, 1 DC	4 SAT+TV, 1 DC
Taps		4 SAT and mixed TV: 2 SCD2 (dCSS) to distribute up to 16 User band SCD/SCD2 on each output and 2 legacy outputs	4 SAT and mixed TV: 2 SCD2 (dCSS) to distribute up to 16 User band SCD/SCD2 on each output and 2 legacy outputs
SAT			
Bandwidth	MHz	950-2150	950-2150
Automatic Gain Control	dB μ V	65-95	65-95
Gain	dB	0 (Legacy)	0 (Legacy)
Max input level	dB μ V	101 (Legacy)	101 (Legacy)
Maximum output level [-35dBc 2 toni]	dB μ V	Legacy: 85, SCR: 85, SCD2 (dCSS): 85	Legacy: 85, SCR: 85, SCD2 (dCSS): 85
SAT-SAT isolation	dB	>25	>25
TV			
Bandwidth	MHz	5-790	5-790
Gain	dB	-2	-2
Max input level	dB μ V	110	110
Tap			
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	980, 1030, 1080, 1130 MHz 1280, 1380, 1480, 1530 MHz 1580, 1630, 1680, 1730 MHz 1780, 1830, 1880, 1930 MHz (comply to SKY UK commands)
Power consumption			
Tap consumption	mA	375@15V	375@15V
Supply voltage	V	12-18 Vdc	12-18 Vdc
Current cons.	mA, V	850@15V	850@15V
Maximum LNB current	mA	300	300
Main features			
Dimensions	mm	120x110x30	120x110x30
operating temperature	°C	-10÷+55	-10÷+55

SCD2 (dCSS) MULTISWITCHES



SCD2-5416



PSU2032

287423

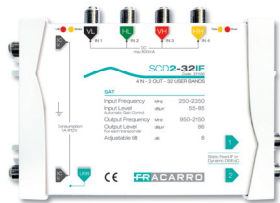
5 INPUT CASCADABLE SCD2 MULTIOUTPUT Series

SCD2 (dCSS) cascable multiswitch, 5 input with AGC and 4 taps with 16 user band each, feeded by STBs.

- **4 Satellite input and 1 passive TV input, 5 trunk lines with 4 user taps to carry the satellite signals up to 16 user band oneach of the 4 coax** (4 SCR tuners and 12 SCD2 dCSS tuners on each output)
- **Automatic Gain Control (AGC):** keep stable the signal levels at the outputs (84dBμV) with an input signals from 70dBμV to 100dBμV.
- Low insertion loss
- **Function mode autodetection** in relation to the connected STB the multiswitch is able to set up to Legacy mode or SCR or SCD2 dCSS without any manual set up. on start up the multiswitch will set to **Legacy** the as soon as the DiSEqC has been sent it set to **SCR o SCD2**. the variation can be seen through a LED close to the user output.
- DC Passthrough on all satellite ports
- **no power supply required**
- **PSU2032 as option** (20V 3.2A) with F female connector to feed the LNB, or any eventual head amplifier.

		SCD2-5216W	SCD2-5416	SCD2-5816
Code		287436	287412	287435
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	4 SAT, 1 TV
Taps		2 for 2 Legacy users, 8 SCR tuners or 32 SCD2 (dCSS) tuners	4 for 4 Legacy users, 16 SCR tuners or 64 SCD2 (dCSS) tuners	8 for 8 Legacy users, 32 SCR tuners or 128 SCD2 (dCSS) tuners
SAT				
Bandwidth	MHz	290-2340 WideBand	950-2150	950-2150
Automatic Gain Control	dBμV	60-100	70-100	70-100
Maximum output level (-35dBc 2 toni)	dBμV	Legacy: 76, SCR: 84, SCD2 (dCSS): 84	Legacy: 76, SCR: 85, SCD2 (dCSS): 85	Legacy: 76, SCR: 85, SCD2 (dCSS): 85
Insertion loss	dB	-1	-1,5	-2,5
SAT-SAT isolation	dB	>30	>30	>30
TV				
Bandwidth	MHz	5-862	5-1000	5-1000
Gain	dB	-12	-16	-20
Insertion loss	dB	-2,5	-3	-6
Tap				
TV band	MHz	5-862	5-790	5-790
SCR frequencies	MHz	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)	1210, 1420, 1680, 2040 (comply to EN50494) 985, 1050, 1115, 1275, 1340, 1485, 1550, 1615, 1745, 1810, 1875, 1940 (comply to EN50607)
Power consumption				
Tap consumption	mA	350@13V	360@14V / 280@18V	380@14V / 300@18V
Current cons.	mA, V	-	560, 20	560, 20
Maximum LNB current	mA	-	500	500
Main features				
Dimensions	mm	90x90x40	220x140x50	220x220x50
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

SCD2 (dCSS) MULTISWITCHES



SCD2-32IF



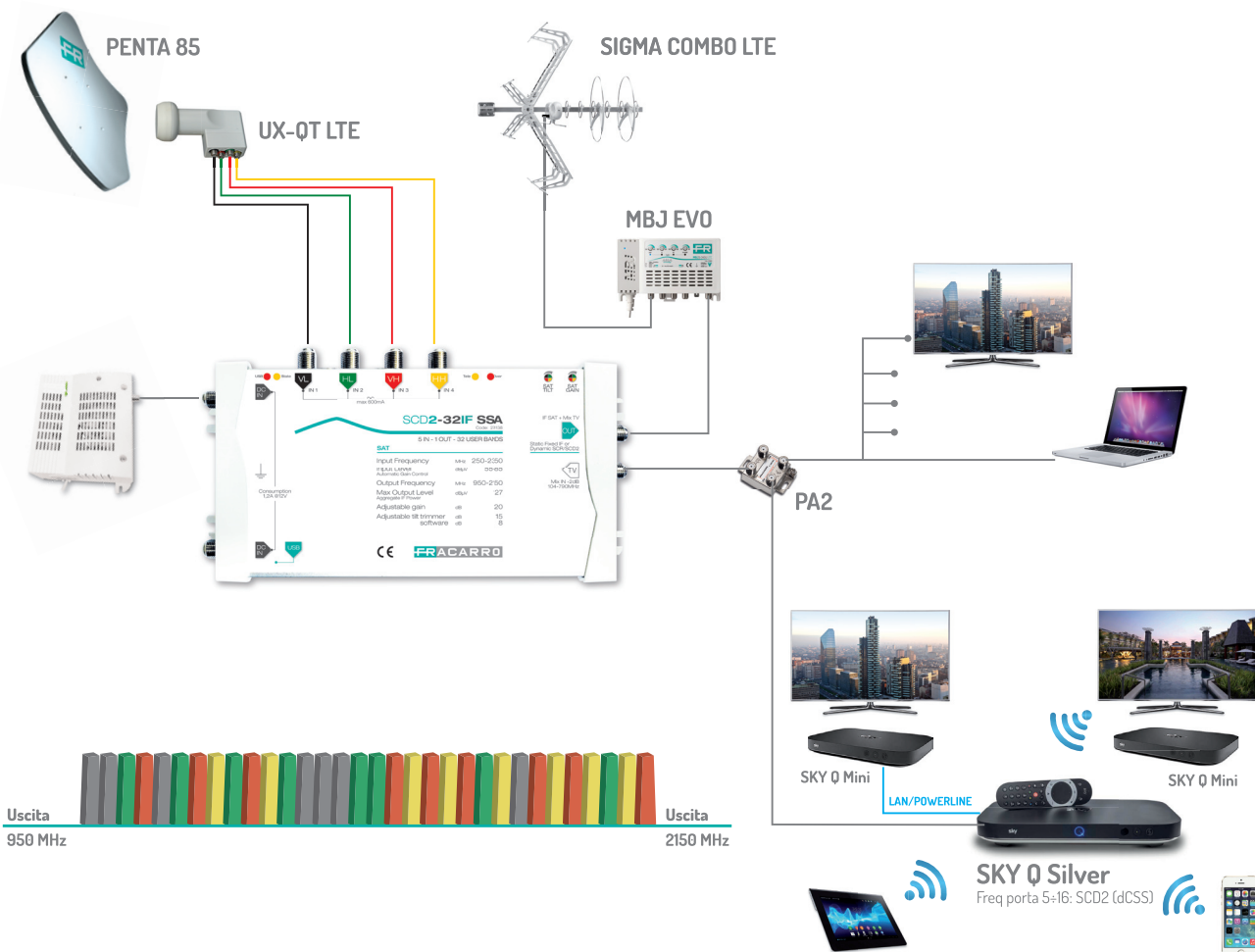
SCD2-32IF SSA

SCD2-32IF Series

SCD2 (dCSS) IF-IF Compact headends with 4 satellite inputs satellite to convert up to 32 DVB-S/S2 transponder (selectable transponder width from 20 to 60MHz).

- **2 models, with or without power amplifier:**
- **SCD2-32IF:** 4 satellite inputs **2 taps** each transponder level **86dBuV**; the system can feed far outlet up to **90 m** from the headend.
- **SCD2-32IF SSA:** 4 satellite inputs, **1 passive TV input** and **1 loop through** Satellite output level **128dBuV**; for a output far up to **150 m** from the headend; Gain adj. **20dB** and slope adj. **15dB**
- **Automatic Gain Control (AGC):** keep stable the signal levels at the outputs (84dBuV) with an input signals from 65dBuV to 85dBuV.
- several satellite can be connected at the input or also **Wide Band LNBS**
- **monitoring LED** USB connection, power status, remote feeding status.
- **isofrequency set up**; the headend can be use to perfectly equalize the transponder in one satellite polarity
- **Fixed mode (IF-IF) or Dynamic** the headend can work also with DiSEqC commands if connected to a SCD2 dCSS or SCR STBs
- **Selectable slope** signals can be positive sloped up to 8dB, (SCD2-32IF SSA has also a fixe 15 dB slope) to recover the cable losses.
- **Double DC connection** for a redundant feeding.
- Small dimensions
- **PC set up software** thorough USB easy setup of input/output frequencies, and all the related parameter as signal levels, slope..

Installation example



Multiswitch

SCD2 (dCSS) MULTISWITCHES

		SCD2-32IF	SCD2-32IF SSA
Code		271130	271138
Inputs		4 SAT	4 SAT, 1 TV
Taps		2 SAT	1 (SAT, TV)
SAT			
Bandwidth	MHz	250-2350	250-2350
Automatic Gain Control	dBμV	55-85	55-85
Gain adjustment	dB	-	20
Slope adj	dB	-	15
Slope adj. per Trasponder	dB	8 (via SW)	8 (via SW)
Max input level	dBμV	97	97
Maximum output level (-35dBc 2 toni)	dBμV	101	127
Max output level (per Trasponder)	dBμV	86	112
Max output level (tone mode)	dBμV	81	107
SAT-SAT isolation	dB	>35	>35
TV			
Bandwidth	MHz	-	114-790
Insertion loss	dB	-	-2
TV-SAT isolation	dB	-	>25
Tap			
Output Trasponder No.		32	32
Operating mode		Static IF-IF / SCR / SCD2 (dCSS)	Static IF-IF / SCR / SCD2 (dCSS)
SAT band	MHz	950-2150	950-2150
Trasponder width	MHz	20-60	20-60
frequency precision	KHz	< 50	< 50
Communication satandards		DiSEqC-SCIF 1° and 2° generation (SCD / SCD2) SCR (EN50494) e SCD2 (EN50607)	DiSEqC-SCIF 1° and 2° generation (SCD / SCD2) SCR (EN50494) e SCD2 (EN50607)
Power consumption			
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60
Power status LED		Double rendondant DC connector	Double rendondant DC connector
Without LNB	mA, V	400, 12	600, 12
With LNB	mA, V	1100, 12	1200, 12
Max current on SAT Line	mA	601 @12V / 300 @18V (only on QD model)	601 @12V / 300 @18V (only on QD model)
Main features			
Dimensions	mm	160x110x30	200x110x30
PSU dimensions	mm	145x120x70	145x120x70
operating temperature	°C	-10÷+55	-10÷+55

HEAD AMPLIFIERS

AMPLIFIER Serie



AMP9254

AMP9254

Head amplifier **5 input** (4 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation



AMP9254A

AMP9254A

Head amplifier **5 input** (4 Satellite and 1 passive TV)

- High SAT Gain
- **Gain** and **slope** adjustment on each SAT input
- High output level
- **Auxiliary F connector** to add an external power supply unit on lines 1 and 2
- perfect for big and medium installation
- Standard colour coding for an easy installation



AMP9294

AMP9294

Head amplifier **9 input** (8 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation

		AMP9254	AMP9254A	AMP9294
Code		271031	271033	271032
Inputs		4 SAT, 1 TV	4 SAT, 1 TV	8 SAT, 1 TV
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	25	32	24
Gain adjustment	dB	15	15	15
Slope adj	dB	-	12	-
Maximum output level [-35dBc 2 toni]	dBμV	112	116	112
TV				
Bandwidth	MHz	5-862	5-862	5-862
Insertion loss	dB	-1	-1	-1
Main features				
Maximum LNB current	mA	400	400	600
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Dimensions	mm	235x125x65	235x125x65	320x125x65
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Multiswitch

Line Amplifiers

LINE AMPLIFIER Series



SWA5414

SWA5414

Head amplifier **5 input** (4 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation



SWA5424

SWA5424

Head amplifier **5 input** (4 Satellite and 1 passive TV).

- High SAT Gain
- **Gain** and **slope** adjustment on each SAT input
- High output level
- **Auxiliary F connector** to add an external power supply unit on lines 1 and 2
- perfect for big and medium installation
- Standard colour coding for an easy installation



SWA5122

SWA5122

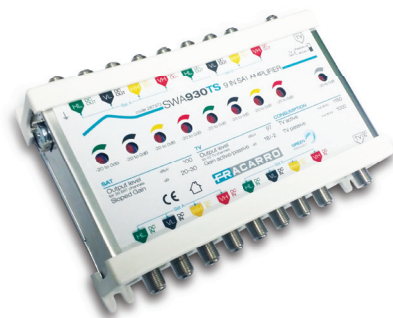
Head amplifier **9 input** (8 Satellite and 1 passive TV).

- **Gain** adjustment on each SAT input
- High output level
- Perfect for small and medium installation
- Standard colour coding for an easy installation

		SWA5414	SWA5424	SWA5122
Code		271036	271034	271035
Inputs		4 SAT	4 SAT	2 SAT, 1 TV
SAT				
Bandwidth	MHz	950-2150	950-2150	950-2150
Gain	dB	16	25	-1
Slope	dB	4	-	-
Gain adjustment	dB	-	15	-
Slope adj	dB	-	15	-
Maximum output level (-35dBc 2 toni)	dBμV	108	116	-
TV				
Bandwidth	MHz	-	-	5-862
Gain	dB	-	-	30
Gain adj.	dB	-	-	15
Slope adj	dB	-	-	15
Maximum output level (-35dBc 2 toni)	dBμV	-	-	116
Return channel				
Bandwidth	MHz	-	-	5-65
Gain	dB	-	-	15
Gain adj.	dB	-	-	10
Maximum output level (-35dBc 2 toni)	dBμV	-	-	106
Main features				
Supply voltage	V	5-18	14-30	14-30 (on SAT lines)
Current cons.	mA, V	120, 14	300, 14	400, 14
Dimensions	mm	90x90x21	198x108x31	198x108x31
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

Line Amplifiers

LINE AMPLIFIER Series



SWA930TS

SWA930TS

Head amplifier **9 input** (8 Satellite and 1 passive TV)

- High SAT Gain
- TV **Gain** Adj.
- **Active or passive TV** selectable via dip switch
- **Gain** adjustment on each SAT input
- Satellite band up to 2300MHz
- High output level
- **Trunk line power supply** or from female **jack connector** (PSUI315TS), every port ha a power status LED.
- Perfect for small and medium installation
- Compact dimensions
- Standard colour coding for an easy installation
- Excellent quality/price ratio

SWA1730TS

Head amplifier **17 input** (16 Satellite and 1 passive TV).

- High SAT Gain
- TV **Gain** Adj.
- **Active or passive TV** selectable via dip switch
- **Gain** adjustment on each SAT input
- Satellite band up to 2300MHz
- High output level
- **Trunk line power supply** or from female **jack connector** (PSUI340TS), every port ha a power status LED.
- Perfect for small and medium installation
- Compact dimensions
- Standard colour coding for an easy installation
- Excellent quality/price ratio



SWA1730TS

		SWA930TS	SWA1730TS
Code		287373	287374
Inputs		8 SAT, 1 TV	16 SAT, 1 TV
SAT			
Bandwidth	MHz	950-2300	950-2300
Gain	dB	30	30
Gain adjustment	dB	20	20
Maximum output level [-35dBc 2 toni]	dBμV	112	112
TV			
Bandwidth	MHz	5-862 passive 47-862 active	5-862 passive 47-862 active
Active gain	dB	18	18
Passive gain	dB	-2	-2
Gain adj.	dB	20	20
Maximum output level [-35dBc 2 toni]	dBμV	ActiveTV: 110	ActiveTV: 110
Maximum output level [-35dBc 2 toni]	dBμV	-	-
Main features			
Supply voltage	V	13-14	13-14
Current cons.	mA, V	Passive TV: 1000, 13 ActiveTV: 1150, 13	Passive TV: 2000, 13 ActiveTV: 2150, 13
Dimensions	mm	170x120x40	290x120x40
operating temperature	°C	-10÷+55	-10÷+55

POWER SUPPLY UNIT

POWER SUPPLY UNIT Series



AMP2000/UK



PSU3001



PSU3001/UK

AMP2000/UK

Power supply unit **14V 2A** with current injector with F connector

- **Removable plug**, available accessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II

PSU3001

Power supply unit **18V 3A** with 2 f connector current injector (max 1,5A each F)

- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II

PSU3001/UK

Power supply unit **18V 3A** with 2 f connector current injector (max 1,5A each F)

- Isolaton class II

		AMP2000/UK	PSU3001	PSU3001/UK
Code		271140	271160	271159
Inputs		1	2	2
Outputs		1	2	2
Bandwidth	MHz	5-2400	5-2400	5-2400
Insertion loss	dB	-1.5	-1.5	-1.5
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	220-240, 50-60
Power status LED		Uk	Eu	Uk
Isolaton class		II	II	II
Output voltage	V	14	18	18
Max output current	mA	2000	1500x2	1500x2
Output connector		F	F x2	F x2
Output polarity		Inner positive, outter negative	Inner positive, outter negative	Inner positive, outter negative
Dimensions	mm	185x100x60	165x63x107	165x63x107
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55

POWER SUPPLY UNIT

POWER SUPPLY UNIT Series



SPS1750



PSU1506



DC-INS



PSU2032

SPS1750

Power supply unit **15V 1A** with f connector current injector

- Low insertion loss
- Wide band TV and Satellite (100MHz - 2400MHz)
- Using **PC8338** the plug can be converted into UK version.
- Isolation class II
- Compact dimensions

PSU1506

Power supply unit **15V 0.6A** with f connector

- Using **PC8338** the plug can be converted into UK version.
- Isolation class II
- Compact dimensions

DC-INS

current injector max current 450mA, it can both work with SCR (190mA) or SCD2 dCSS (350mA)

- Low insertion loss
- Wide band TV and Satellite (100MHz - 2400MHz)
- Low voltage drop
- Compact dimensions

PSU2032

Power supply unit **20V 3.2A** with f connector current injector

- **Removable plug**, available accessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolation class II
- Compact dimensions

		SPS1750	PSU1506	DC-INS	PSU2032
Code		289087	287155	271126	287423
Inputs		1	-	1 SAT, TV	-
Outputs		1	-	1 SAT, TV	-
Bandwidth	MHz	40-2150	-	100-2400	-
Insertion loss	dB	-1	-	-1	-
Supply voltage	V, Hz	220-240, 50-60	220-240, 50-60	-	100-240, 50-60
Power status LED		Eu	Eu	-	Eu
Isolation class		II	II	-	II
Output voltage	V	15	15	-	20
Max output current	mA	1000	600	450	3200
Output connector		F	F	F x3	F
Output polarity		Inner positive, outer negative	Inner positive, outer negative	-	Inner positive, outer negative
Dimensions	mm	40x70x90	46x66x90	48x50x22	140x55x35
operating temperature	°C	-10÷+55	-10÷+55	-10÷+55	-10÷+55

POWER SUPPLY UNIT

POWER SUPPLY UNIT Series



PSUI220JA

PSUI220JA

Power supply unit **12V 2A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

- **adapter** for Europa, South America, l'Asia (**type C**), UK, Ireland, Malta, Malesia Singapore (**typo G**) USA, Canada, Mexico e japan (**typo A**), Australia, New Zeland, China, Argentina (**typo I**) included
- Isolaton class II
- Compact dimensions
- Excellent quality/price ratio

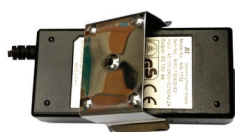


PSUI315TS

PSUI315TS

Power supply unit **13V 1.5A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions



PSUI340TS

PSUI340TS

Power supply unit **13V 4A** with male Jack current injector (2,5x5,5x12; inner positive, outer negative)

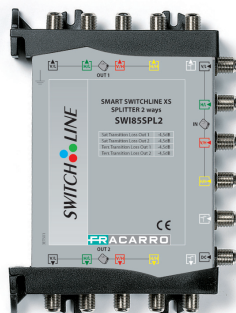
- **Removible plug**, available accessories **CVMS-EU** standard European plug.
- Using **PC8338** the plug can be converted into UK version.
- Isolaton class II
- Compact dimensions

		PSUI220JA	PSUI315TS	PSUI340TS
Code		287405	287375	287376
Supply voltage	V, Hz	100-240, 50-60	220-240, 50-60	220-240, 50-60
Power status LED		with adapters	Eu	Eu
Isolaton class		II	II	II
Output voltage	V	12	13	13
Max output current	mA	2000	1500	4000
Output connector		M-Type Jack 2.5x5,5x12	M-Type Jack 2.1x5,5x12	M-Type Jack 2.1x5,5x12
Output polarity		Inner positive, outter negative	Inner positive, outter negative	Inner positive, outter negative
Dimensions	mm	78x48x35	90x70x45	110x52x34
operating temperature	°C	0÷45	0÷40	0÷40

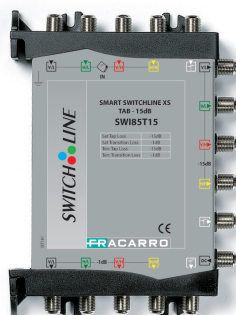
MULTISWITCH ACESSORIES

TAPS AND SPLITTER Series

CATIVE Taps and splitter for the multiswitch line



SWI85SPL2



SWI85T15

		SWI85SPL2	SWI85T15
Code		271096	271095
Inputs		4 SAT, 1 TV, 1 DC	4 SAT, 1 TV
Outputs		4 SAT, 1 TV	4 SAT, 1 TV
Taps		4 SAT, 1 TV	4 SAT, 1 TV, 1 DC
SAT			
Bandwidth	MHz	950-2150	950-2150
Insertion loss	dB	-4.5	-2
Tap loss	dB	-	-13
SAT-SAT isolation	dB	≥30	≥30
TV			
Bandwidth	MHz	5-862	5-862
Insertion loss	dB	-4.5	-2
Tap loss	dB	-	-13
Main features			
Dimensions	mm	160x118x30	160x118x30
operating temperature	°C	-10÷+55	-10÷+55

MULTISWITCH ACESSORIES

MULTISWITCH ACCESSORIES Series

Connector for multiswitches

Item	Code	Description	Pcs
PC8338	287398	UK to Eu converter	1
SCP3	287399	SCHUKO to UK converter	1
FEB	287203	F compression connector for single earth bound	1



PC8338



SCP3



FEB

Distribution

CLAMP

PAM SPLITTER Series	141
DEM TAPS Series	141

CLAMP

CAD S SPLITTER Series	142
SI Series	143
CAD S ACCESSORIES Series	143
CAD SPLITTER Series	144
CAD TAPS Series	144
CADv DIRECTIONAL TAPS Series	144

F CONNECTORS

PA Vertical splitter Series	145
DE Series	145
DE vertical taps Series	146
SPTR horizontal splitter Series	147
TAPS horizontal Series	148

TV-SAT WALLOUTLET

SPI and IEC walloutlet Series	150
SPF F outlet Series	151
PDM demix outlet Series	151

OUTLET ADAPTORS

OUTLET ADAPTORS Series	152
OUTLET ADAPTORS Series	153

WALLMOUNT TV SAT OUTLET

PRI DEMIX round outlet	154
PAS00 TV/SAT round outlet Series	154

CABLE CONNECTOR

IEC connector Series	155
F Connector Series	156

CONNECTOR ACCESSORIES

75ohm Loads Series	156
Adapter Series	156

COAXIAL CABLES

Indoor use cables	157
Outdoor cables Series	159
Multiple cable Series	160

CLAMP

PAM SPLITTER Series

PAM clamp splitter for SAT and TV band (5-2400MHz)

thanks to the **fixing harpin**, the coax inner is tight fixed on the clamp, to easy fix the cables.

very small die cast housing combined with clamps decrease the required installation dimension.

excellent shielding assure the protection to any eventual unwanted signal.



PA2M

Item		PA2M	PA3M	PA4M	PA5M
Outputs		2	3	4	5
Insertion loss (dB)	RC 5-40 MHz	4	6,6	8,1	10,6
	TV 47-862 MHz	4,3	7,2	8,7	11,2
	SAT 950-1750 MHz	5,1	8,1	9,6	12,7
	SAT 1750-2150 MHz	5,8	8,5	10,5	13,5
	SAT 2150-2400 MHz	6,8	10,5	11,5	16,5
Outputs isolation(dB)	RC 5-40 MHz	21	21	21	21
	TV 47-862 MHz	21	21	21	21
	SAT 950-1750 MHz	21	21	21	21
	SAT 1750-2150 MHz	21	21	21	21
	SAT 2150-2400 MHz	20	20	20	20

DEM TAPS Series

DEM clamp tap for SAT and TV band (5-2400MHz)

thanks to the **fixing harpin**, the coax inner is tight fixed on the clamp, to easy fix the cables.

very small die cast housing combined with clamps decrease the required installation dimension.

excellent shielding assure the protection to any eventual unwanted signal.



DE122M

Item		DE110M	DE114M	DE118M	DE122M	DE210M	
Insertion loss (dB)	RC 5-40 MHz	1,6	1,2	1	1	3,5	
	TV 47-862 MHz	1,7	1,3	1,1	1,1	3,5	
	SAT 950-1750 MHz	2	1,8	1,3	1,3	4,5	
	SAT 1750-2150 MHz	2,5	2	1,5	1,5	5	
	SAT 2150-2400 MHz	3	2,8	2,2	2,2	5,5	
Outputs isolation(dB)	RC 5-40 MHz	20	20	20	20	20	
	TV 47-862 MHz	20	20	20	20	20	
	SAT 950-1750 MHz	20	20	20	20	20	
	SAT 1750-2150 MHz	20	20	20	20	20	
	SAT 2150-2400 MHz	20	20	20	20	20	
Item		DE214M	DE218M	DE222M	DE412M	DE418M	DE422M
Insertion loss (dB)	RC 5-40 MHz	2	1,5	1	4,2	2	1
	TV 47-862 MHz	2,4	1,7	1,3	4,3	2,2	1,5
	SAT 950-1750 MHz	3	2,1	2	4,5	3	1,6
	SAT 1750-2150 MHz	3,2	2,2	2,2	5	3,2	1,8
	SAT 2150-2400 MHz	3,5	2,5	2,4	5,5	3,5	2
Outputs isolation(dB)	RC 5-40 MHz	20	20	20	20	20	20
	TV 47-862 MHz	20	20	20	20	20	20
	SAT 950-1750 MHz	20	20	20	20	20	20
	SAT 1750-2150 MHz	20	20	20	20	20	20
	SAT 2150-2400 MHz	20	20	20	20	20	20

Distribution

CLAMP

CAD S SPLITTER Series

CAD S clamp splitter for SAT and TV band (5-2400MHz)

- Excellent **class A shielding** and a perfect 75 ohm impedance.
- **each cable has his own clamp** for a wide band distribution also with different cables dimensions.
- Operating functions are **patented by Fracarro** to realise a quick and easy installation.



PP2



PP4

Item		PP2	PP3	PP4	PP5
Code		220802	220803	220804	220805
Outputs		2	3	4	5
Insertion loss (dB)	RC 5-40 MHz	4	6,5	9,5	11
	TV 47-862 MHz	4	6,5	9,5	11
	SAT 950-1750 MHz	4,5	6,5	10	11,5
	SAT 1750-2150 MHz	5	7	10,5	12
	SAT 2150-2400 MHz	5,5	8	11	13
Outputs isolation(dB)	RC 5-40 MHz	25	20	20	20
	TV 47-862 MHz	22	20	25	25
	SAT 950-1750 MHz	20	20	25	25
	SAT 1750-2150 MHz	20	20	20	22
	SAT 2150-2400 MHz	18	18	18	18
Item		CD1-10	CD1-14	CD1-18	CD1-22
Code		220810	220814	220818	220822
Taps		1	1	1	1
Insertion loss (dB)	RC 5-40 MHz	1,8	0,8	0,8	0,8
	TV 47-862 MHz	1,6	0,8	0,8	0,8
	SAT 950-1750 MHz	2	1,3	1,3	1,3
	SAT 1750-2150 MHz	2,3	1,5	1,5	1,5
	SAT 2150-2400 MHz	2,6	2	2	2
Tap loss (dB)	RC 5-40 MHz	10	14,5	18	22
	TV 47-862 MHz	10	14,5	18	22
	SAT 950-1750 MHz	10	14,5	17,5	21,5
	SAT 1750-2150 MHz	10	14,5	18	22
	SAT 2150-2400 MHz	10	14	18	22
Outputs isolation(dB)	RC 5-40 MHz	28	30	32	36
	TV 47-862 MHz	30	33	35	40
	SAT 950-1750 MHz	30	25	30	35
	SAT 1750-2150 MHz	28	25	27	30
	SAT 2150-2400 MHz	32	24	24	27
Item		CD2-10	CD2-14	CD2-18	CD2-22
Code		220830	220834	220838	220842
Taps		2	2	2	2
Insertion loss (dB)	RC 5-40 MHz	3,5	1,6	1,6	1,6
	TV 47-862 MHz	3	1,5	1,5	1,5
	SAT 950-1750 MHz	3,3	2,5	2,5	2,5
	SAT 1750-2150 MHz	4,2	2,7	2,7	2,7
	SAT 2150-2400 MHz	4,7	3,5	3,5	3,5
Tap loss (dB)	RC 5-40 MHz	11	15	18	22
	TV 47-862 MHz	10	15	18	22
	SAT 950-1750 MHz	10,5	14,5	18	22
	SAT 1750-2150 MHz	10,5	14,5	18	22
	SAT 2150-2400 MHz	11	14,5	18	22
Outputs isolation(dB)	RC 5-40 MHz	25	30	32	35
	TV 47-862 MHz	28	35	37	40
	SAT 950-1750 MHz	23	25	28	32
	SAT 1750-2150 MHz	20	23	26	30
	SAT 2150-2400 MHz	18	23	26	30

CLAMP



CD4-12

Item		CD4-12	CD4-14	CD4-18
Code		220852	220854	220858
Taps		4	4	4
Insertion loss (dB)	RC 5-40 MHz	4	3,5	1,6
	TV 47-862 MHz	3,7	3,3	1,5
	SAT 950-1750 MHz	4,5	3,7	2,5
	SAT 1750-2150 MHz	5,5	4,5	3,5
	SAT 2150-2400 MHz	6,5	5	4
Tap loss (dB)	RC 5-40 MHz	13	14	19
	TV 47-862 MHz	12	14	18
	SAT 950-1750 MHz	12	14,5	18
	SAT 1750-2150 MHz	12,5	14,5	18
	SAT 2150-2400 MHz	13	14,5	18
Outputs isolation(dB)	RC 5-40 MHz	27	30	33
	TV 47-862 MHz	27	30	35
	SAT 950-1750 MHz	27	30	33
	SAT 1750-2150 MHz	25	25	30
	SAT 2150-2400 MHz	25	25	25

CLAMP

SI Series

CAD S clamp splitter for SAT and TV band (5-2400MHz) with indoor plastic housing

- the family is composed by PP2, PP3 o PP4 mounted on BIC plastic housing to easy realise the wallmount
- Excellent **class A shielding** and a perfect 75 ohm impedance.
- each cable has his own clamp** for a wide band distribution also with different cables dimensions.
- Operating functions are **patented by Fracarro** to realise a quick and easy installation.

Item	Code	Description	Pcs
SI2	220872	CAD S 2 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1
SI3	220873	CAD S 3 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1
SI4	220874	CAD S 4 way splitter up to 2400MHz with plastic housing (PP2+BIC)	1
Item	Code	Description	Pcs
BIC	220800	CAD S Indoor plastic housing	20
BOC	220801	CAD S outdoor plastic housing	1
ARD	220891	CAD S din rail mounting	10

CAD S ACESSORIES Series

CAD S indoor and outdoor box



SI2



BIC

BOC



ARD

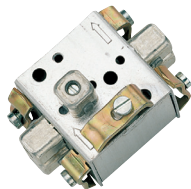
Distribution

CLAMP

CAD SPLITTER Series

Clamp splitter for TV band (47-862MHz)

- **Metal frame housing** with shielded screw clam connector
- To realise a good installatio we suggest the use of both Slitter and Taps
- **1 input and 2, 3 o 4 outputs**
- V.S.W.R. <1.2.



PP12

Item		PP12	PP13	PP14
Code		220370	220376	220390
Outputs	No.	2	3	4
Insertion loss	dB	4	6	7
Isolation B1	dB	18	15	10
Isolation B3	dB	18	15	10
Isolation B4	dB	18	15	10
Isolation B5	dB	18	15	10
Item		PP12DC	PP14DC	IP2
Code		220375	220392	220322
Outputs	No.	2	4	2
Insertion loss	dB	4	8	4
Isolation B1	dB	18	10	18
Isolation B3	dB	18	10	18
Isolation B4	dB	18	10	18
Isolation B5	dB	18	10	18

CLAMP

CAD TAPS Series

Resistive clamp taps for TV band (47-862MHz)

- **Metal frame housing** with shielded screw clam connector
- To realise a good installatio we suggest the use of both Slitter and Taps
- Taps can be installed on trunk lines or as tap on end of the line using a 75 ohm load
- **1 input, 1 trunk line and 1, 2 o 4 output taps.**

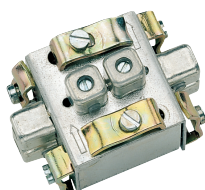
Item		CD11	CD12
Code		220660	220670
Taps	No.	1	2
Insertion loss	dB	0.8/1.1	1.3/1.8
Isolation Tap output	47-68MHz	10	11
	174-230MHz	10	11
	470-606MHz	10	10
	606-862MHz	10	10
	47-68MHz	-	21
	174-230MHz	-	21
	470-606MHz	-	19
	606-862MHz	-	19
Input V.S.W.R.		<1.2	<1.4

CLAMP

CADv DIRECTIONAL TAPS Series

clamp Inductive taps for TV band (47-862MHz)

- **Metal frame housing** with shielded screw clam connector
- High isolation between outputs and sloped frequency response to compensate the cable loss.
- **1 input, 1 output trunk line and 1, 2, 3 o 4 output taps.**



CAD11

Item		CAD11	CAD12	CAD13	CAD14
Code		220451	220452	220453	220454
Taps	No.	1	2	3	4
Insertion loss	dB	0.1/0.7	0.1/0.8	0.2/2	0.1/1.9
Isolation Tap output	47-68MHz	27	27	27	27
	174-230MHz	17	18	17	17
	470-606MHz	11	12	12	12
	606-862MHz	12	13	15	15
	47-68MHz	45	53	40/44	48/60
	174-230MHz	38	43	35/30	37/60
	470-606MHz	36	30	34/25	29/52
	606-862MHz	35	26	32/35	25/45
Input V.S.W.R.		<1.1	<1.2	<1.3	<1.2

F CONNECTORS

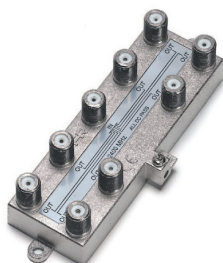
PA Vertical splitter Series

F connector **vertical splitter** for TV and Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between outputs to input.**



PA2



PA8

Item		PA2	PA3	PA4
Code		280701	280703	280702
Outputs		2	3	4
Insertion loss (dB)	RC 5-40 MHz	4	7	7,5
	TV 47-862 MHz	4	8	8,5
	SAT 950-1750 MHz	5,5	10	11
	SAT 1750-2150 MHz	5,5	10,5	11,5
	SAT 2150-2400 MHz	6	11	12
Outputs isolation(dB)	RC 5-40 MHz	22	22	30
	TV 47-862 MHz	21	22	28
	SAT 950-1750 MHz	20	22	26
	SAT 1750-2150 MHz	20	22	22
	SAT 2150-2400 MHz	23	22	22
Item		PA6	PA8	
Code		280704	280705	
Outputs		6	8	
Insertion loss (dB)	RC 5-40 MHz	10,5	12	
	TV 47-862 MHz	11	12,5	
	SAT 950-1750 MHz	13,5	15,5	
	SAT 1750-2150 MHz	14,5	16,5	
	SAT 2150-2400 MHz	16	17	
Outputs isolation(dB)	RC 5-40 MHz	22	20	
	TV 47-862 MHz	22	20	
	SAT 950-1750 MHz	22	20	
	SAT 1750-2150 MHz	22	20	
	SAT 2150-2400 MHz	22	20	

F CONNECTORS

DE Series

F connector **vertical taps** for TV and Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**



DE1-10

Item		DE1-10	DE1-14	DE1-18	DE1-22
Code		280710	280711	280712	280713
Taps		1	1	1	1
Insertion loss (dB)	RC 5-40 MHz	1,5	1	0,8	0,6
	TV 47-862 MHz	1,3	0,8	0,7	0,5
	SAT 950-1750 MHz	1,6	1,2	0,9	0,8
	SAT 1750-2150 MHz	2	1,3	1	1
	SAT 2150-2400 MHz	2	1,5	1,3	1,7
Tap loss (dB)	RC 5-40 MHz	10,5	14	18,5	22
	TV 47-862 MHz	10,5	14	18,5	22
	SAT 950-1750 MHz	11	14	18,5	22
	SAT 1750-2150 MHz	11	14	18,5	22
	SAT 2150-2400 MHz	11	14	18,5	22
Outputs isolation(dB)	RC 5-40 MHz	40	32	45	50
	TV 47-862 MHz	34	29	34	36
	SAT 950-1750 MHz	27	28	31	33
	SAT 1750-2150 MHz	24	30	27	31
	SAT 2150-2400 MHz	24	25	22	27

Distribution

F CONNECTORS

DE vertical taps Series

F connector **vertical taps** for TV and Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**



DE2-10



DE4-12



DE4-18



DE4-22

Item		DE2-10	DE2-14	DE2-18	DE2-22
Code		280714	280715	280716	280717
Taps		2	2	2	2
Insertion loss (dB)	RC 5-40 MHz	2,5	1,5	1,2	1,2
	TV 47-862 MHz	2,5	1,5	1,2	1,1
	SAT 950-1750 MHz	2,5	1,8	1,5	1,5
	SAT 1750-2150 MHz	2,8	2	1,8	1,8
	SAT 2150-2400 MHz	3,5	2,2	2	2,2
Tap loss (dB)	RC 5-40 MHz	10	14	18	22
	TV 47-862 MHz	10	14	18	22
	SAT 950-1750 MHz	10	14	18	22
	SAT 1750-2150 MHz	10	11	18	22
	SAT 2150-2400 MHz	10	11,5	19	22
Outputs isolation(dB)	RC 5-40 MHz	25	35	45	45
	TV 47-862 MHz	28	27	33	38
	SAT 950-1750 MHz	25	25	27	31
	SAT 1750-2150 MHz	25	23	27	27
	SAT 2150-2400 MHz	23	23	25	27
Item		DE4-12	DE4-14	DE4-18	DE4-22
Code		280718	280719	280720	280721
Taps		4	4	4	4
Insertion loss (dB)	RC 5-40 MHz	3,5	2,5	1,5	1
	TV 47-862 MHz	3,9	2,4	1,3	1
	SAT 950-1750 MHz	5,1	3	1,5	1,2
	SAT 1750-2150 MHz	5,2	3,5	1,8	1,5
	SAT 2150-2400 MHz	5,4	4	2	1,5
Tap loss (dB)	RC 5-40 MHz	11,5	14,5	18	21,5
	TV 47-862 MHz	11,5	13,8	18	21,8
	SAT 950-1750 MHz	13	14	18,5	22,5
	SAT 1750-2150 MHz	14	14,5	19	23
	SAT 2150-2400 MHz	15,5	15	19	24
Outputs isolation(dB)	RC 5-40 MHz	35	32	45	38
	TV 47-862 MHz	33	34	45	35
	SAT 950-1750 MHz	28	30	35	31
	SAT 1750-2150 MHz	28	27	30	27
	SAT 2150-2400 MHz	28	30	30	26

F CONNECTORS

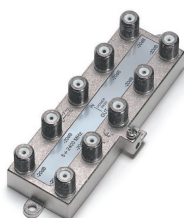
DE vertical taps Series

F connector **vertical taps** for TV and Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**



DE6-16



DE8-20

Item		DE6-16	DE6-20	DE8-16	DE8-20
Code		280722	280723	280725	280726
Taps		6	6	8	8
Insertion loss (dB)	RC 5-40 MHz	4,5	2,5	4,5	2,5
	TV 47-862 MHz	5	3	5	3
	SAT 950-1750 MHz	5,5	4	5,5	4,5
	SAT 1750-2150 MHz	5,5	4,5	5,5	5
	SAT 2150-2400 MHz	5,5	5,5	5,5	5,5
Tap loss (dB)	RC 5-40 MHz	14	19	14	19
	TV 47-862 MHz	14	19	15	19
	SAT 950-1750 MHz	15	19,5	16,5	19
	SAT 1750-2150 MHz	16,5	20	18	19
	SAT 2150-2400 MHz	18	20	19,5	20
Outputs isolation(dB)	RC 5-40 MHz	25	30	30	30
	TV 47-862 MHz	22	24	25	23
	SAT 950-1750 MHz	22	22	25	20
	SAT 1750-2150 MHz	22	22	25	20
	SAT 2150-2400 MHz	22	22	25	20

F CONNECTORS

SPTR horizontal splitter Series

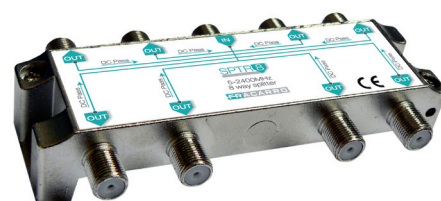
F connector **"top-down" horizontal splitter** for TV e Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between outputs to input.**

Item		SPTR2	SPTR3	SPTR4	SPTR6	SPTR8
Code		287305	287307	287306	287308	287309
Outputs		2	3	4	6	8
Insertion loss (dB)	RC 5-40 MHz	3,5	7	6	10	11
	TV 47-862 MHz	4	8	7	11	12,5
	SAT 950-1750 MHz	4	8	7	11,5	12,5
	SAT 1750-2150 MHz	5	9,5	9	14,5	15,5
	SAT 2150-2400 MHz	5,5	10	9,5	16	16
Outputs isolation(dB)	RC 5-40 MHz	27,5	20	25	27,5	27,5
	TV 47-862 MHz	20	20	20	25	25
	SAT 950-1750 MHz	20	20	20	25	25
	SAT 1750-2150 MHz	18	18	20	25	25
	SAT 2150-2400 MHz	18	18	18	25	25



SPTR2



SPTR8

Distribution

F CONNECTORS

TAPS horizontal Series

F connector "top-down" horizontal taps for TV e Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**



TAPS110



TAPS212

Item		TAPS110	TAPS115	TAPS120
Code		287310	287311	287312
Taps		1	1	1
Insertion loss (dB)	RC 5-40 MHz	2	1.5	1
	TV 47-862 MHz	2	1.5	1
	SAT 950-1750 MHz	2.5	2	1.5
	SAT 1750-2150 MHz	3	2.5	2
	SAT 2150-2400 MHz	3.5	3	2.5
Tap loss (dB)	RC 5-40 MHz	10	15	20
	TV 47-862 MHz	10	15	20
	SAT 950-1750 MHz	10	15	20
	SAT 1750-2150 MHz	10	15	20
	SAT 2150-2400 MHz	10	15	20
Outputs isolation(dB)	RC 5-40 MHz	28	35	39
	TV 47-862 MHz	24	26	29
	SAT 950-1750 MHz	23	25	25
	SAT 1750-2150 MHz	22	23	25
	SAT 2150-2400 MHz	22	23	25
Item		TAPS212	TAPS215	TAPS220
Code		287313	287314	287315
Taps		2	2	2
Insertion loss (dB)	RC 5-40 MHz	3	2	1.5
	TV 47-862 MHz	3	2.5	2
	SAT 950-1750 MHz	3.5	3.5	3
	SAT 1750-2150 MHz	4	3.5	3
	SAT 2150-2400 MHz	5	4	4
Tap loss (dB)	RC 5-40 MHz	12	15	20
	TV 47-862 MHz	12	15	20
	SAT 950-1750 MHz	12	15	20
	SAT 1750-2150 MHz	12	15	20
	SAT 2150-2400 MHz	12	15	20
Outputs isolation(dB)	RC 5-40 MHz	25	30	33
	TV 47-862 MHz	25	30	30
	SAT 950-1750 MHz	25	27	28
	SAT 1750-2150 MHz	22	25	28
	SAT 2150-2400 MHz	21	25	25

F CONNECTORS

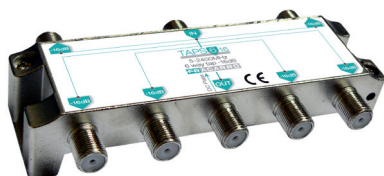
TAPS horizontal Series

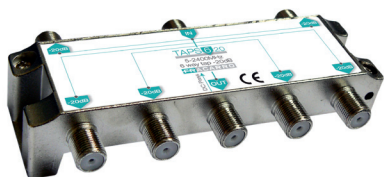
F connector "top-down" horizontal taps for TV e Satellite band (5-2400MHz)

- The design and the small dimensions allow the installation in any wallbox.
- **Nickel plated die cast housing**, assure high performances with low losses, high return loss and high outputs isolation.
- Built in earth bounding screw and wallmount fixings
- **DC passthrough between trunk line to input.**



TAPS420



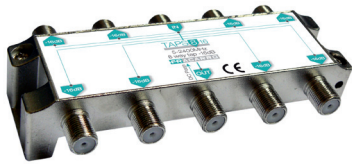


TAPS620

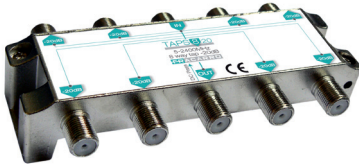
Item		TAPS412	TAPS415	TAPS420
Code		287316	287317	287318
Taps		4	4	4
Insertion loss (dB)	RC 5-40 MHz	2.5	2.5	2
	TV 47-862 MHz	3	2.5	2
	SAT 950-1750 MHz	3	2.5	2
	SAT 1750-2150 MHz	3.5	3	3
	SAT 2150-2400 MHz	4	4	3.5
Tap loss (dB)	RC 5-40 MHz	12	15	20
	TV 47-862 MHz	12	15	20
	SAT 950-1750 MHz	12	15	20
	SAT 1750-2150 MHz	12	15	20
	SAT 2150-2400 MHz	12	15	20
Outputs isolation(dB)	RC 5-40 MHz	28	30	33
	TV 47-862 MHz	24	25	28
	SAT 950-1750 MHz	23	24	26
	SAT 1750-2150 MHz	22	23	24
	SAT 2150-2400 MHz	22	22	23
Item		TAPS616	TAPS620	
Code		287319	287320	
Taps		6	6	
Insertion loss (dB)	RC 5-40 MHz	4	2.5	
	TV 47-862 MHz	4.5	2.5	
	SAT 950-1750 MHz	5	3	
	SAT 1750-2150 MHz	5.5	4.5	
	SAT 2150-2400 MHz	7	5.5	
Tap loss (dB)	RC 5-40 MHz	16	20	
	TV 47-862 MHz	16	20	
	SAT 950-1750 MHz	16	20	
	SAT 1750-2150 MHz	16	20	
	SAT 2150-2400 MHz	16	20	
Outputs isolation(dB)	RC 5-40 MHz	25	24	
	TV 47-862 MHz	25	24	
	SAT 950-1750 MHz	24	24	
	SAT 1750-2150 MHz	22	22	
	SAT 2150-2400 MHz	21	21	

Distribution

F CONNECTORS



TAPS816



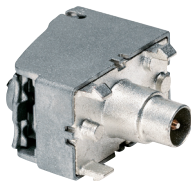
TAPS820

Item		TAPS816	TAPS820
Code		287321	287322
Taps		8	8
Insertion loss (dB)	RC 5-40 MHz	4.5	2.5
	TV 47-862 MHz	5	3
	SAT 950-1750 MHz	5.5	3
	SAT 1750-2150 MHz	5.5	4.5
	SAT 2150-2400 MHz	7	5.5
Tap loss (dB)	RC 5-40 MHz	16	20
	TV 47-862 MHz	16	20
	SAT 950-1750 MHz	16	20
	SAT 1750-2150 MHz	16	20
	SAT 2150-2400 MHz	16	20
Outputs isolation(dB)	RC 5-40 MHz	23	24
	TV 47-862 MHz	23	23
	SAT 950-1750 MHz	22	23
	SAT 1750-2150 MHz	21	22
	SAT 2150-2400 MHz	20	21

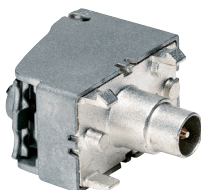
TV-SAT WALLOUTLET

SPI and IEC walloutlet Series
single outlet with 1 output male IEC connector
for TV e Satellite band (5-2400MHz)

- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4



SPI00



SPI22

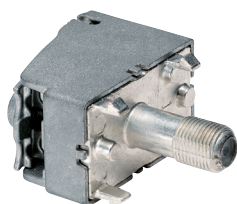
Item		SPI00	SPI05	SPI10
Code		220711	220712	220713
Insertion loss (dB)	RC 5-40 MHz	-	5	2.5
	TV 47-862 MHz	-	5	2.5
	SAT 950-1750 MHz	-	7	3
	SAT 1750-2150 MHz	-	7	3
	SAT 2150-2400 MHz	-	8	3.2
Tap loss (dB)	RC 5-40 MHz	0.5	5	10.5
	TV 47-862 MHz	0.5	5	10
	SAT 950-1750 MHz	0.8	7	10.5
	SAT 1750-2150 MHz	0.8	7	10.5
	SAT 2150-2400 MHz	0.8	8	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male	IEC male	IEC male
Item		SPI14	SPI18	SPI22
Code		220714	220715	220716
Insertion loss (dB)	RC 5-40 MHz	1.5	1.5	1.5
	TV 47-862 MHz	1.2	1.2	1.2
	SAT 950-1750 MHz	2.2	2.2	2.2
	SAT 1750-2150 MHz	2.2	2.2	2.2
	SAT 2150-2400 MHz	2.5	2.5	2.5
Tap loss (dB)	RC 5-40 MHz	15	18.5	22.5
	TV 47-862 MHz	14.5	18	22
	SAT 950-1750 MHz	14.5	18	22
	SAT 1750-2150 MHz	14.5	18	22
	SAT 2150-2400 MHz	15	18.5	22.5
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male	IEC male	IEC male

TV-SAT WALLOUTLET

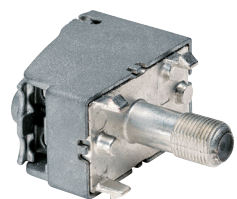
SPF F outlet Series

single outlet with 1 output male F connector for TV e Satellite band (5-2400MHz)

- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4



SPF00



SPF22

Item		SPF00	SPF05	SPF10
Code		220721	220722	220723
Insertion loss (dB)	RC 5-40 MHz	-	5	2.5
	TV 47-862 MHz	-	5	2.5
	SAT 950-1750 MHz	-	7	3
	SAT 1750-2150 MHz	-	7	3
	SAT 2150-2400 MHz	-	8	3.2
Tap loss (dB)	RC 5-40 MHz	0.5	5	10.5
	TV 47-862 MHz	0.5	5	10
	SAT 950-1750 MHz	0.8	7	10.5
	SAT 1750-2150 MHz	0.8	7	10.5
	SAT 2150-2400 MHz	0.8	8	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		F female	F female	F female
Item		SPF14	SPF18	SPF22
Code		220724	220725	220726
Insertion loss (dB)	RC 5-40 MHz	1.5	1.5	1.5
	TV 47-862 MHz	1.2	1.2	1.2
	SAT 950-1750 MHz	2.2	2.2	2.2
	SAT 1750-2150 MHz	2.2	2.2	2.2
	SAT 2150-2400 MHz	2.5	2.5	2.5
Tap loss (dB)	RC 5-40 MHz	15	18.5	22.5
	TV 47-862 MHz	14.5	18	22
	SAT 950-1750 MHz	14.5	18	22
	SAT 1750-2150 MHz	14.5	18	22
	SAT 2150-2400 MHz	15	18.5	22.5
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		F female	F female	F female

TV-SAT WALLOUTLET

PDM demix outlet Series

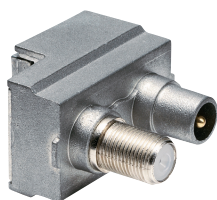
single outlet with 2 output IEC connector for TV (47-862MHz) and F connector for Satellite band (950-2400MHz)

- The outlet demix SAT and TV combined in a single input **2 connectors** IEC and F at the output.
- **DC pass through** from F connector (SAT) and the input clamp for terminal outlet and from F connector (SAT) and the input/output clamp on the passthrough outlet
- The outlet is designed with an innovative system to connect to coaxial cable. It enables the user to connect to a cable with a diameter between 5 and 7mm.
- Fully shielded (**class A**)
- **plastic adapter** for all the brands available on the market
- Comply to EN50083-4

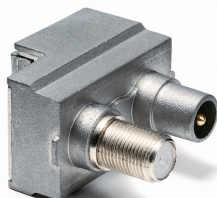
Item		PDM00	PDM05	PDM10
Code		220003	220002	220001
Insertion loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	-	6	4
	SAT 950-1750 MHz	-	6	4
	SAT 1750-2150 MHz	-	6	4
	SAT 2150-2400 MHz	-	6	4
Tap loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	2	6	10
	SAT 950-1750 MHz	2	6	11
	SAT 1750-2150 MHz	2	6	11
	SAT 2150-2400 MHz	2	6	11
Outlet type		Terminal outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male, F female	IEC male, F female	IEC male, F female

Distribution

TV-SAT WALLOUTLET



PDM00



PDM10

Item		PDM14	PDM18	PDM22
Code		220004	220005	220006
Insertion loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	3	2.5	2.5
	SAT 950-1750 MHz	3.5	3.5	3.5
	SAT 1750-2150 MHz	3.5	3.5	3.5
	SAT 2150-2400 MHz	3.5	3.5	3.5
Tap loss (dB)	RC 5-40 MHz	-	-	-
	TV 47-862 MHz	14	19	22
	SAT 950-1750 MHz	15	19	23
	SAT 1750-2150 MHz	15	19	23
	SAT 2150-2400 MHz	15	19	23
Outlet type		Passthrough outlet	Passthrough outlet	Passthrough outlet
Connector		IEC male, F female	IEC male, F female	IEC male, F female

OUTLET ADAPTORS

OUTLET ADAPTORS Series

plastic adapter for all the brands available on the market



BT-INT



BT-INT2

Item	Code	adaptors	Color	Type	Pcs
BT-AX	287126	Ticino Axolute ®	White	Single	20
BT-AX2	287127	Ticino Axolute ®	White	Demix	10
BT-AXS	289737	Ticino Axolute Silver ®	Silver	Single	20
BT-AXS2	289739	Ticino Axolute Silver ®	Silver	Demix	10
BT-AXB	289738	Ticino Axolute Black ®	Black	Single	20
BT-AXB2	289740	Ticino Axolute Black ®	Black	Demix	10
BT-INT	280754	Ticino International ®	Black	Single	20
BT-INT2	280801	Ticino International ®	Black	Demix	10
BT-LIG	280752	Ticino Light ®	Ice	Single	20
BT-LIG2	280802	Ticino Light ®	Ice	Demix	10
BT-LIGT	280699	Ticino Light Tech ®	Dark grey	Single	20
BT-LIGT2	280803	Ticino Light Tech ®	Dark grey	Demix	10
BT-MA	280755	Ticino Magic ®	Ivory	Single	20
BT-MA2	280804	Ticino Magic ®	Ivory	Demix	10
BT-LIV	280753	Ticino Living ®	Black	Single	20
BT-LIV2	280805	Ticino Living ®	Black	Demix	10
BT-LU	280756	Ticino Luna ®	White	Single	20
BT-LU2	280806	Ticino Luna ®	White	Demix	10
BT-MAT	280757	Ticino Matix ®	White	Single	20
BT-MAT2	280807	Ticino Matix ®	White	Demix	10
BT-TT	280742	Ticino Magic TT ®	Ivory	Single	20
BT-MATT2	280808	Ticino Magic TT ®	Ivory	Demix	10
VI-EKN	289798	Vimar Eikon Next ®	Dark grey	Single	20
VI-EKN2	289799	Vimar Eikon Next ®	Dark grey	Demix	10
VI-EKW	280839	Vimar Eikon White ®	White	Single	20
VI-EKW2	280840	Vimar Eikon White ®	White	Demix	10
VI-EKB	289741	Vimae Eikon Black ®	Black	Single	20
VI-EKB2	289742	Vimae Eikon Black ®	Black	Demix	10
VI-ID	280749	Vimar Idea ®	Black	Single	20
VI-ID2	280810	Vimar Idea ®	Black	Demix	10
VI-IDB	280748	Vimar Idea white ®	White	Single	20
VI-IDB2	280811	Vimar Idea white ®	White	Demix	10
VI-80	280750	Vimar 8000 ®	Ivory	Single	20
VI-802	280809	Vimar 8000 ®	Ivory	Demix	10
VI-PL	280751	Vimar Plana ®	White	Single	20
VI-PL2	280812	Vimar Plana ®	White	Demix	10
VI-PLS	287121	Vimar Plana Silver ®	Silver	Single	20
VI-PLS2	287122	Vimar Plana Silver ®	Silver	Demix	10
GW-CB	280837	Gewiss Chorus polish White ®	Shiny white	Single	20
GW-CB2	280838	Gewiss Chorus polish White ®	Shiny white	Demix	10
GW-CN	280835	Gewiss Chorus silk black ®	Nero lucido	Single	20
GW-CN2	280836	Gewiss Chorus silk black ®	Nero lucido	Demix	10
GW-CT	280833	Gewiss Chorus Titanium ®	Colored titanium	Single	20
GW-CT2	280834	Gewiss Chorus Titanium ®	Colored titanium	Demix	10
GW-PL	280797	Gewiss Playbus ®	Black	Single	20
GW-PL2	280813	Gewiss Playbus ®	Black	Demix	10

OUTLET ADAPTORS

OUTLET ADAPTORS Series

plastic adapter for all the brands available on the market



BT-MAT



BT-MAT2



VI-PL



VI-PL2



PL1

Item	Code	adaptors	Color	Type	Pcs
GW-SYB	280796	Gewiss System Black ®	Black	Single	20
GW-SYB2	280814	Gewiss System Black ®	Black	Demix	10
GW-SYW	280798	Gewiss System White ®	White	Single	20
GW-SYW2	280815	Gewiss System White ®	White	Demix	10
AB-CH	280831	ABB Chiara ®	White	Single	20
AB-CH2	280832	ABB Chiara ®	White	Demix	10
AV-SNO	280743	Ave Sistema 45 Noir ®	Black	Single	20
AV-SNO2	280816	Ave Sistema 45 Noir ®	Black	Demix	10
AV-SBA	280745	Ave Sistema 45 Banquise ®	Ice	Single	20
AV-SBA2	280817	Ave Sistema 45 Banquise ®	Ice	Demix	10
AV-SBL	280746	Ave Sistema 45 Blanc ®	White	Single	20
AV-SBL2	280818	Ave Sistema 45 Blanc ®	White	Demix	10
LG-CR	280747	Legrand Cross ®	White	Single	20
LG-CR2	280820	Legrand Cross ®	White	Demix	10
LG-VES	280800	Legrand Vela Scura ®	Black	Single	20
LG-VES2	280821	Legrand Vela Scura ®	Black	Demix	10
LG-VEC	280799	Legrand Vela Chiara ®	Ice	Single	20
LG-VEC2	280822	Legrand Vela Chiara ®	Ice	Demix	10
VI-ARK-B	287331	Arke Black ®	Black	Single	20
VI-ARK2-B	287304	Arke Black ®	Black	Demix	10
VI-ARK-W	287330	Arke White ®	White	Single	20
VI-ARK2-W	287303	Arke White ®	White	Demix	10
PL1	280736	SPI and SPF plastic cover (European box Ø 60mm)	White	Demix	50
VI-EKB	280841	Vimae Eikon Black ®	Black	Single	20
VI-EKB2	280842	Vimae Eikon Black ®	Black	Demix	10
VI-ID	280749	Vimar Idea ®	Black	Single	20
VI-ID2	280810	Vimar Idea ®	Black	Demix	10
VI-IDB	280748	Vimar Idea white ®	White	Single	20
VI-IDB2	280811	Vimar Idea white ®	White	Demix	10
VI-80	280750	Vimar 8000 ®	Ivory	Single	20
VI-802	280809	Vimar 8000 ®	Ivory	Demix	10
VI-PL	280751	Vimar Plana ®	White	Single	20
VI-PL2	280812	Vimar Plana ®	White	Demix	10
VI-PLS	287121	Vimar Plana Silver ®	Silver	Single	20
VI-PLS2	287122	Vimar Plana Silver ®	Silver	Demix	10
GW-CB	280837	Gewiss Chorus polish White ®	Shiny white	Single	20
GW-CB2	280838	Gewiss Chorus polish White ®	Shiny white	Demix	10
GW-CN	280835	Gewiss Chorus silk black ®	Nero lucido	Single	20
GW-CN2	280826	Gewiss Chorus silk black ®	Nero lucido	Demix	10
GW-CT	280833	Gewiss Chorus Titanium ®	Colored titanium	Single	20
GW-CT2	280834	Gewiss Chorus Titanium ®	Colored titanium	Demix	10
GW-PL	280797	Gewiss Playbus ®	Black	Single	20
GW-PL2	280813	Gewiss Playbus ®	Black	Demix	10
GW-SYB	280796	Gewiss System Black ®	Black	Single	20
GW-SYB2	280814	Gewiss System Black ®	Black	Demix	10
GW-SYW	280798	Gewiss System White ®	White	Single	20
GW-SYW2	280815	Gewiss System White ®	White	Demix	10
AB-CH	280831	ABB Chiara ®	White	Single	20
AB-CH2	280832	ABB Chiara ®	White	Demix	10
AV-SNO	280743	Ave Sistema 45 Noir ®	Black	Single	20
AV-SNO2	280816	Ave Sistema 45 Noir ®	Black	Demix	10
AV-SBA	280745	Ave Sistema 45 Banquise ®	Ice	Single	20
AV-SBA2	280817	Ave Sistema 45 Banquise ®	Ice	Demix	10
AV-SBL	280746	Ave Sistema 45 Blanc ®	White	Single	20
AV-SBL2	280818	Ave Sistema 45 Blanc ®	White	Demix	10
LG-CR	280747	Legrand Cross ®	White	Single	20
LG-CR2	280820	Legrand Cross ®	White	Demix	10
LG-VES	280800	Legrand Vela Scura ®	Black	Single	20
LG-VES2	280821	Legrand Vela Scura ®	Black	Demix	10
LG-VEC	280799	Legrand Vela Chiara ®	Ice	Single	20
LG-VEC2	280822	Legrand Vela Chiara ®	Ice	Demix	10
VI-ARK-B	287331	Arke Black ®	Black	Single	20
VI-ARK2-B	287304	Arke Black ®	Black	Demix	10
VI-ARK-W	287330	Arke White ®	White	Single	20
VI-ARK2-W	287303	Arke White ®	White	Demix	10
PL1	280736	SPI and SPF plastic cover (European box Ø 60mm)	White	Demix	50

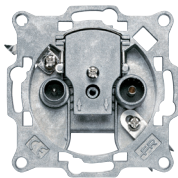
Distribution

WALLMOUNT TV SAT OUTLET

PRI DEMIX round outlet

Wallmount **Round demix outlet 2 output** female IEC connector for TVband (5-40MHz, 47-862MHz) and male IEC connector for Satellite band (950-2300MHz)

- **Demix on SAT and TV on 2 outputs**
Signals combined at the input.
- **DC passthrough** between male IEC (SAT) and the inout clamp for terminal outlet, andbetween male IEC (SAT) and the input/output clamp on the passthrough outlet.
- High shielding
- High silotatino between bands
- Low insertion loss
- Quick and easy installation
- **Plastic adapter** available (PL2)



PRI00

Item			PRI00	PRI06	PRI10
Code			280730	280731	280732
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-40 / 47-862	5-40 / 47-862	5-40 / 47-862
TV	Insertion loss	dB	1.5	2	1.5
SAT	Connector		IEC male	IEC male	IEC male
SAT	Bandwidth	MHz	950-2300	950-2300	950-2300
SAT	Insertion loss	dB	2	2.5	2
Tap loss	5-2400 MHz	dB	-	6	10
Outlet type			Terminal outlet	Passthrough outlet	Passthrough outlet
Dimensions			mm	76x76x32	76x76x32
Item			PRI14	PRI18	PRI22
Code			280733	280734	280735
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-40 / 47-862	5-40 / 47-862	5-40 / 47-862
TV	Insertion loss	dB	1.5	1.5	1.5
SAT	Connector		IEC male	IEC male	IEC male
SAT	Bandwidth	MHz	950-2300	950-2300	950-2300
SAT	Insertion loss	dB	2	2	2
Tap loss	5-2400 MHz	dB	14	18	22
Outlet type			Passthrough outlet	Passthrough outlet	Passthrough outlet
Dimensions			mm	76x76x32	76x76x32

WALLMOUNT TV SAT OUTLET

PAS00 TV/SAT round outlet Series

Wallmount **Demix round outlet with 2, 3 or 4 outputs** Radio IEC male connctor, TV IEC female connector and SAT F female connector.



PAS0021D

Item			PAS0021D	PAS0032	PAS0032D
Code			PAS0021D	PAS0032	PAS0032D
Outputs			2	3	3
TV	Connector		IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-68 / 260-862	5-68 / 120-862	5-68 / 260-862
TV	insertion loss	dB	2	1.5	1.5
R	Connector		IEC male	IEC male	IEC male
R	Bandwidth	MHz	88-240	88-108	88-240
R	insertion loss	dB	3	2	2
SAT1	Connector		-	F female	F female
SAT1	Bandwidth	MHz	-	950-2150	950-2300
SAT1	insertion loss	dB	-	2	2
Outlet type			Terminal outlet	Terminal outlet	Terminal outlet
Dimensions			80x80x48	80x80x48	80x80x48

WALLMOUNT TV SAT OUTLET


PAS002331I



PAS0042D



PAS0042

Item			PAS0042	PAS0042D	PAS002331I	PAS002341I
Code			PAS0042	280793	PAS002331I	PAS002341I
Outputs			4	4	2	2
TV	Connector		IEC Female	IEC Female	IEC Female	IEC Female
TV	Bandwidth	MHz	5-68 / 120-862	5-68 / 260-862	5-68 / 120-862	5-68 / 120-862
TV	insertion loss	dB	2.5	2.5	1.5	1
R	Connector		IEC male	IEC male	IEC male	IEC male
R	Bandwidth	MHz	88-108	88-240	88-108	88-108
R	insertion loss	dB	2.5	2.5	1.5	1
SAT1	Connector		F female	F female	-	-
SAT1	Bandwidth	MHz	950-2150	950-2150	-	-
SAT1	insertion loss	dB	2	2	-	-
SAT2	Connector		F female	F female	-	-
SAT2	Bandwidth	MHz	5-2150	5-2150	-	-
SAT2	insertion loss	dB	3	3	-	-
Outlet type			Terminal outlet	Terminal outlet	Passthrough outlet	Passthrough outlet
Dimensions			80x80x48	80x80x48	80x80x48	80x80x48

CABLE CONNECTOR
IEC connector Series

Male and female IEC cable connectors

- screw Inner conductor connection
- Quick and easy installation
- Compact dimensions



SP1



PR5

Item		SP1	SP5	PR1	PR5	PR11
Code		290351	290354	290451	290454	290365
Connector		IEC male	IEC male	IEC Female	IEC Female	90° female IEC
Inner connection		Screw	Screw	Screw	Screw	Screw
braiding connection		Screw	Clamp	Screw	Clamp	Clamp
cable diameter	mm	9.5	8	9.5	8	7,5
Pcs	No.	100	100	100	100	50
Item		CCOM_IEC6F		CCOM_IEC6M		
Code		287298		287300		
Connector		IEC Female		IEC male		
braiding connection		Compression		Compression		
cable diameter	mm	5.9-6.0		5.9-6.0		
Pcs	No.	100		100		

Distribution

CABLE CONNECTOR

F Connector Series

several types of screw F connector, crimp or compression

- Quick and easy installation
- Compact dimensions



CF50B



CFR50B



CCF66



CCOM_F5.1S

Item		CF50B	CF60B	CF66B	CF70B
Code		287189	287190	287191	287192
Connector		Screw Male F connector	Screw Male F connector	Screw Male F connector	Screw Male F connector
Cable connection		Screw	Screw	Screw	Screw
cable diameter	mm	4.9-5.0	5.9-6.0	6.5-6.6	6.9-7.0
Ring color		Red	Green	Yellow	Blue
Pcs	No.	100	100	100	100
Item		CFR50B	CFR60B	CFR66B	
Code		287193	287194	287195	
Connector		Quick Male F connector	Quick Male F connector	Quick Male F connector	
Cable connection		Screw	Screw	Screw	
cable diameter	mm	4.9-5.0	5.9-6.0	6.5-6.6	
Ring color		Red	Green	Yellow	
Pcs	No.	100	100	100	
Item			CCF66		
Code			289768		
Connector			Screw Male F connector		
Cable connection			Crimp		
cable diameter	mm	6.5-6.6			
Ring color			Yellow		
Pcs	No.	100			
Item		CCOM_F5.1	CCOM_F5.1S	CCOM_F10.5	
Code		287301	287295	287297	
Connector		Screw Male F connector	Screw Male F connector	Screw Male F connector	
Cable connection		Compression	Compression self install	Compression	
cable diameter	mm	5.0-5.1	5.0-5.1	10.4-10.5	
Ring color		light blue	light blue	Yellow	
Pcs	No.	100	50	100	

CONNECTOR ACCESSORIES

75ohm Loads Series

75 ohm loads



CA75F



CR75I

Adapter Series

Accessories and adapters for several connectors or cables



TF90

Item	Code	Description	Pcs
CA75F	289085	F connector 75ohm load	100
T75IF	290002	Isolated 75 ohm load	20
CR75I	289776	Coaxial isolated 75 ohm load	20
Item	Code	Description	Pcs
TF90	289543	90° F male-female	50
GCF	289544	F female-F female connector	50
GC1	290030	Mal-Male F connector	100
PAUTV	280373	Double F female-F female with earth bonding screw	250
PAS3236Q	PAS3236Q	Quick F male-F male	1
PAS3213001	PAS3213001	F male-F Female with DC block	20
PAS6106	PAS6106	6dB in line attenuator 5-2400MHz	5

COAXIAL CABLES

Indoor use cables



PAS4025202



PAS4037104



PAS4016102

Item			PAS4025202	PAS4037104	PAS4016102
Code			289700	PAS4037104	PAS4016102
Inner conductor	Material		CU	CU	CU
	Diameter	mm	0.80	1.13	1.0
Dielectric	Material		PEE	PEE	PEE
	Diameter	mm	3.5	4.85	4.7
Braid	Foil		Al/Pet	Al/Pet	Al/Pet
		%	100%	100%	100%
	Braid		CuSn	Al	CuSn
		%	40%	35%	40%
Antimigrating foil			PET	PET	PET
Jacket outdoor use	Material		White PVC	White PVC	White PVC
	Diameter	mm	5	6.8	6.7
Impedance	@ 200 MHz	Ohm	75	75	75
Capacity		pF/m	52	52	52
Propagation speed			85%	85%	85%
Minimum bending radius			35	35	35
Attenuation	@ 5 MHz	dB	2.0	1.5	1.6
	@ 50 MHz	dB	5.9	4.3	4.6
	@ 200 MHz	dB	11.3	8.4	9.0
	@ 470 MHz	dB	17.6	13.6	14.5
	@ 800 MHz	dB	23.3	17.2	18.6
	@ 1000 MHz	dB	26.3	19.8	21.1
	@ 1350 MHz	dB	30.8	23.3	25.0
	@ 1750 MHz	dB	35.6	27.0	27.9
	@ 2150 MHz	dB	40.0	30.6	31.7
	@ 2400 MHz	dB	42.2	32.5	33.2
	@ 2700 MHz	dB	45.2	35.0	35.8
Return loss	@ 30-470 MHz	dB	>28	>29	>30
	@ 470-862 MHz	dB	>26	>25	>25
	@ 862-1750 MHz	dB	>20	>20	>20
	@ 1750-2400 MHz	dB	>20	>20	>20
Shielding efficiency	@ 5-30 MHz	dB	>65	>65	>75
	@ 30-1000 MHz	dB	>80	>80	>85
	@ 1000-2150 MHz	dB	>85	>70	>85
Inner conductor resistance		Ohm/Km	35	21.5	22.5
Outer conductor resistance		Ohm/Km	33	27	27
Lenght		m	200	100	100

Distribution

COAXIAL CABLES

Indoor use cables



PAS4017101



PAS4007111



PAS4009101

Item			PAS4017101	PAS4007111	PAS4009101
Code			PAS4017101	PAS4007111	PAS4009101
Inner conductor	Material		CU	CU	CU
	Diameter	mm	1.13	1.13	1.7
Dielectric	Material		PEE	PEE	PEE
	Diameter	mm	4.8	4.8	7.2
Braid	Foil		Al/Pet	Al/Pet/Al	Al/Pet
		%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn
		%	40%	40%	56%
	Foil		-	Al/Pet	-
		%	-	100%	-
Antimigrating foil			PET	PET	PET
Jacket outdoor use	Material		White PVC	White PVC	White PVC
	Diameter	mm	6.8	6.8	10.2
Impedance	@ 200 MHz	Ohm	75	75	75
Capacity		pF/m	52	52	52
Propagation speed			85%	85%	85%
Minimum bending radius			35	35	115
Attenuation	@ 5 MHz	dB	1.3	1.3	0.8
	@ 50 MHz	dB	4.3	4.1	2.6
	@ 200 MHz	dB	8.4	8.0	5.4
	@ 470 MHz	dB	13.4	12.6	8.5
	@ 800 MHz	dB	17.2	16.8	11.0
	@ 1000 MHz	dB	19.5	18.9	12.9
	@ 1350 MHz	dB	23.0	22.3	15.2
	@ 1750 MHz	dB	26.2	25.5	17.6
	@ 2150 MHz	dB	29.5	28.7	19.8
	@ 2400 MHz	dB	31.9	30.4	21.5
Return loss	@ 2700 MHz	dB	33.0	32.8	23.2
	@ 30-470 MHz	dB	>30	>30	>30
	@ 470-862 MHz	dB	>28	>28	>28
	@ 862-1750 MHz	dB	>23	>25	>25
Shielding efficiency	@ 1750-2400 MHz	dB	>23	>20	>18
	@ 5-30 MHz	dB	>75	>85	>80
	@ 30-1000 MHz	dB	>85	>95	>85
	@ 1000-2150 MHz	dB	>85	>90	>85
Inner conductor resistance		Ohm/Km	18	18	9
Outer conductor resistance		Ohm/Km	26	21	9.7
Lenght		m	100	100	100

COAXIAL CABLES

Outdoor cables Series



PAS4136104



PAS4116102



PAS4117101



PAS4107111



PAS4109101

Item			PAS4136104	PAS4116102	PAS4117101	PAS4107111	PAS4109101
Code			PAS4136104	PAS4116102	PAS4117101	PAS4107111	PAS4109101
Inner conductor	Material		CU	CU	CU	CU	CU
	Diameter	mm	1.0	1.0	1.13	1.13	1.7
Dielectric	Material		PEE	PEE	PEE	PEE	PEE
	Diameter	mm	4.7	4.7	4.8	4.8	7.2
Braid	Foil		Al/Pet	Al/Pet	Al/Pet	Al/Pet/Al	Al/Pet
		%	100%	100%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn	CuSn	CuSn
		%	30%	40%	40%	40%	56%
	Foil		-	-	-	Al/Pet	-
		%	-	-	-	100%	-
Antimigrating foil			PET	PET	PET	PET	PET
Jacket outdoor use	Material		Black PVC	Black PVC	Black PVC	Black PVC	Black PVC
	Diameter	mm	6.7	6.7	6.8	6.8	10.2
Impedance	@ 200 MHz	Ohm	75	75	75	75	75
Capacity		pF/m	52	52	52	52	52
Propagation speed			85%	85%	85%	85%	85%
Minimum bending radius			35	35	35	35	115
Attenuation	@ 5 MHz	dB	1.6	1.6	1.3	1.3	0.8
	@ 50 MHz	dB	4.6	4.6	4.3	4.1	2.6
	@ 200 MHz	dB	9.0	9.0	8.4	8.0	5.4
	@ 470 MHz	dB	14.5	14.5	13.4	12.6	8.5
	@ 800 MHz	dB	18.6	18.6	17.2	16.8	11.0
	@ 1000 MHz	dB	21.1	21.1	19.5	18.9	12.9
	@ 1350 MHz	dB	25.0	25.0	23.0	22.3	15.2
	@ 1750 MHz	dB	27.9	27.9	26.2	25.5	17.6
Return loss	@ 2150 MHz	dB	31.7	31.7	29.5	28.7	19.8
	@ 2400 MHz	dB	33.2	33.2	31.9	30.4	21.5
	@ 2700 MHz	dB	35.8	35.8	33.0	32.8	23.2
	@ 30-470 MHz	dB	>30	>30	>30	>30	>30
	@ 470-862 MHz	dB	>25	>25	>28	>28	>28
	@ 862-1750 MHz	dB	>20	>20	>23	>25	>25
	@ 1750-2400 MHz	dB	>20	>20	>23	>20	>18
	@ 5-30 MHz	dB	>65	>75	>75	>85	>80
Shielding efficiency	@ 30-1000 MHz	dB	>75	>85	>85	>95	>85
	@ 1000-2150 MHz	dB	>80	>85	>85	>90	>85
Inner conductor resistance	Ohm/Km		22.5	22.5	18	18	9
Outer conductor resistance	Ohm/Km		31	27	26	21	9.7
Lenght	m		100	100	100	100	100

Distribution

COAXIAL CABLES

Multiple cable Series



PAS4004112



PAS4304102



PAS4004102



PAS4004109

Item			PAS4004112	PAS4304102	PAS4004102	PAS4004109
Code			PAS4004112	PAS4304102	PAS4004102	PAS4004109
Inner conductor	Material		CU	CU	CU	CU
	Diameter	mm	1.710	1.0	1.0	1.13
Dielectric	Material		PEE	PEE	PEE	PEE
	Diameter	mm	7.4	7.4	7.4	4.8
Braid	Foil		Al/Pet	Al/Pet	Al/Pet	Al/Pet
		%	100%	100%	100%	100%
	Braid		CuSn	CuSn	CuSn	CuSn
		%	40%	40%	40%	40%
Antimigrating foil			PET	PET	PET	PET
Jacket indoor ude	Material		PVC 4 color	PVC 4 color	PVC 5 color	PVC 9 color
	Diameter	mm	6.6	6.6	6.6	6.6
Jacket outdoor use	Material		White PVC	White PVC	White PVC	Black PVC
	Diameter	mm	19	19	20.5	25
Impedance	@ 200 MHz	Ohm	75	75	75	75
Capacity		pF/m	52	52	52	52
Propagation speed			85%	85%	85%	85%
Minimum bending radius			100	100	100	200
Attenuation	@ 5 MHz	dB	1.6	1.6	1.6	1.3
	@ 50 MHz	dB	4.6	4.6	4.6	4.3
	@ 200 MHz	dB	9.0	9.0	9.0	8.4
	@ 470 MHz	dB	14.5	14.5	14.5	13.4
	@ 800 MHz	dB	18.6	18.6	18.6	17.2
	@ 1000 MHz	dB	21.1	21.1	21.1	19.5
	@ 1350 MHz	dB	25.0	25.0	25.0	23.0
	@ 1750 MHz	dB	27.9	27.9	27.9	26.2
	@ 2150 MHz	dB	31.7	31.7	31.7	29.5
	@ 2400 MHz	dB	33.2	33.2	33.2	31.9
	@ 2700 MHz	dB	35.8	35.8	35.8	33.0
Return loss	@ 30-470 MHz	dB	>30	>30	>30	>30
	@ 470-862 MHz	dB	>25	>25	>25	>28
	@ 862-1750 MHz	dB	>20	>20	>20	>23
	@ 1750-2400 MHz	dB	>20	>20	>20	>23
Shielding efficiency	@ 5-30 MHz	dB	>30	>30	>30	>30
	@ 30-1000 MHz	dB	>85	>85	>85	>85
	@ 1000-2150 MHz	dB	>85	>85	>85	>85
Inner conductor resistance		Ohm/Km	22.5	22.5	22.5	18
Outer conductor resistance		Ohm/Km	27	27	27	26
Lenght		m	100	100	100	100

CAVI COASSIALI

Cavi coassiali per uso interno con guaina in PVC

Fracarro dispone sia di modelli adatti alle singole installazioni (classe B), sia agli impianti multiutenza (classe A), come hotel, condomini, ospedali, negozi, ecc. I modelli "con doppio schermo", inoltre, consentono di raggiungere valori di schermatura particolarmente elevati (superiori a 90 dB), adatti alle applicazioni professionali.

Cavi coassiali per uso esterno o per posa interrata

I cavi per esterno (per la quasi totalità di classe A) garantiscono l'ottima schermatura e livelli di attenuazione contenuti. La guaina esterna in polietilene consente di installare questi cavi anche in condizioni particolari, dove sia presente un elevato tasso di umidità, come tetti o balconi.

Cavi coassiali multipli

Questi modelli agevolano l'installatore nella posa di cavi negli impianti con multiswitch (dove si richiede cioè l'utilizzo di un gran numero di cavi nella stessa linea). In un unico cavo sono racchiusi 4, 5 o 9 singoli cavi coassiali, con colori diversi l'uno dall'altro per facilitarne l'identificazione e il collegamento.

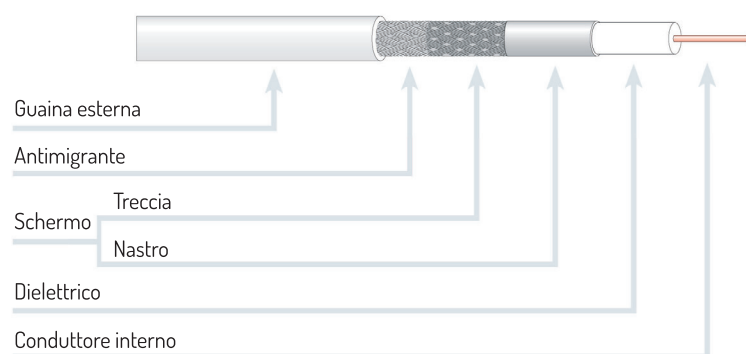
Caratteristiche generali

Range di temperatura durante la messa in posa: $-5^{\circ}\text{C} \div +50^{\circ}\text{C}$

Range di temperatura di esercizio: $-15^{\circ}\text{C} \div +55^{\circ}\text{C}$

Norma di riferimento EN50117

CAVI COASSIALI - legenda



Legenda

Cu:	Rame
CW:	Acciaio Ramato
AL:	Alluminio
CuSn:	Rame Stagnato
PEE:	Espanso Fisico
PE:	Polietilene
PET:	Poliestere
PVC:	Polivinil Cloruro
LSZH:	Basso sviluppo di fumo e senza alogeni
AL/PET:	Nastro Alluminio + Poliestere
AL/PET/AL:	Nastro Alluminio + Poliestere + Nastro Alluminio
Cu/PET:	Nastro Rame + Poliestere
Cu/PET/Cu:	Nastro Rame + Poliestere + Nastro Rame

Indice dei prodotti

Articolo	Codice	Pagina
10BL45F	219446	31
10BL4F	219406	31
10BL5F	219407	31
10F2734	219532	29
10F3546	219541	29
10RD45F	219546	30
10RD4F	219506	30
10RD5F	219507	30
3DG-2ASI-2T	283160	73
3DG-2S2-2T	283157	69
3DG-2T2-2T	283159	71
3DG-4S2-4T	283162	69
3DG-4S2-BP	283163	69
3DG-4T2-4T	283165	71
3DG-4T2-BP	283166	71
3DG-BOX	283156	75
3DG-BP-IP OUT	283164	74
4E512_F	218706	11
4SC/APC CONN	287345	110
6E512_F	218718	11
8SC/APC CONN	287347	110
AB-CH	280831	156
AB-CH2	280832	156
AFI112LTE700AUS	223240	55
AFI112T	223230	55
AFI121T	223231	55
AFI122T	223233	55
AFI123T	223235	55
AFI123W	223237	55
AFI313T	223236	55
AM100N	289113	55
AM102N	289119	55
AM50N	289112	55
AMP2000/UK	271140	139
AMP522PL	289601	63
AMP9254	271031	136
AMP9254A	271033	136
AMP9294	271032	136
AMP9564	223371	63
AMP9762	235051	63
AMP9762B	235055	63
AMP9762UK	235054	63
AMP9763	235052	63
AMP9763B	235056	63
AMP9764	235053	63
ANI	293301	41
ANT1200A	213001	10
AR20F	287202	150
ARD	220891	146
AS20	284013	46
ATI4LTE59	226712	54
ATI4LTE60	226713	54
AV-SBA	280745	156
AV-SBA2	280817	156
AV-SBL	280746	156
AV-SBL2	280818	156
AV-SNO	280743	156
AV-SNO2	280816	156
BA6	293400	41
BA914	280674	41
BFO-SC-APC	289349	110
BIC	220800	146
BLU 10 B4	217903	35
BLU 10 B5	217904	35
BLU COMBO LTE	217911	20
BLU10HD	217902	35
BLU10HDLTE	217909	15
BLU22HD LTE	217912	15
BLU5HD	217901	35

Articolo	Codice	Pagina
BLU5HDLTE	217910	15
BLV4F	218038	12
BLV6F	218058	12
BOC	220801	146
BR2-AA	289360	110
BR4-AA	289362	110
BT-AX	287126	155
BT-AX2	287127	155
BT-AXB	289738	155
BT-AXB2	289740	155
BT-AXS	289737	155
BT-AXS2	289739	155
BT-INT	280754	155
BT-INT2	280801	155
BT-LIG	280752	155
BT-LIG2	280802	155
BT-LIGT	280699	155
BT-LIGT2	280803	155
BT-LIV	280753	155
BT-LIV2	280805	155
BT-LU	280756	155
BT-LU2	280806	155
BT-MA	280755	155
BT-MA2	280804	155
BT-MAT	280757	155
BT-MAT2	280807	155
BT-MATT2	280808	155
BT-TT	280742	155
CA2	219602	41
CA75F	289085	159
CAD11	220451	147
CAD12	220452	147
CAD13	220453	147
CAD14	220454	147
CAPPUCCIOPVC	287294	41
CAV8	287282	39
CAV8DIST	287280	39
CAV8UNIVERSAL	287281	39
CCF66	289768	159
CCOM_F10.5	287297	159
CCOM_F5.1	287301	159
CCOM_F5.1S	287295	159
CCOM_IEC6F	287298	158
CCOM_IEC6M	287300	158
CD11	220660	147
CD1-10	220810	145
CD1-14	220814	145
CD1-18	220818	145
CD12	220670	147
CD1-22	220822	145
CD2-10	220830	145
CD2-14	220834	145
CD2-18	220838	145
CD2-22	220842	145
CD4-12	220852	146
CD4-14	220854	146
CD4-18	220858	146
CF50B	287189	159
CF60B	287190	159
CF66B	287191	159
CF70B	287192	159
CFR50B	287193	159
CFR60B	287194	159
CFR66B	287195	159
CONTROPIASTRA	287291	41
CR75I	289776	159
CSOE 2U	287418	116
CWDM5	287342	113
DAB	213010	10

Articolo	Codice	Pagina
DATA PON RX	287416	115
DATA PON RX WF	287417	115
DATA PON TX	287415	115
DC-INS	271126	140
DE1-10	280710	148
DE110M	tbd	144
DE1-14	280711	148
DE114M	tbd	144
DE1-18	280712	148
DE118M	tbd	144
DE1-22	280713	148
DE122M	tbd	144
DE2-10	280714	149
DE210M	tbd	144
DE2122M	tbd	144
DE2-14	280715	149
DE214M	tbd	144
DE2-18	280716	149
DE218M	tbd	144
DE2-22	280717	149
DE4-12	280718	149
DE412M	tbd	144
DE4-14	280719	149
DE4-18	280720	149
DE418M	tbd	144
DE4-22	280721	149
DE422M	tbd	144
DE6-16	280722	150
DE6-20	280723	150
DE8-16	280725	150
DE8-20	280726	150
DGTX10	211111	42
DGTX10-A	211112	42
DGTX10-GA	211116	42
DIGIT	211101	42
DIGIT-A	211104	42
DIGIT-G	211102	42
DIGIT-GA	211105	42
DIGIT-R	211103	42
DIGIT-RA	211106	42
D-MATRIX 4S	283131	67
D-MATRIX 4S EVO	283132	67
D-MATRIX 8T	283133	67
DSQ21J	289588	46
DSQ41J	289589	46
ELIKA	213226	18
ELIKA 700 C	213229	18
ELIKA 700 P	213228	18
ELIKA PRO	213227	19
ELIKA PRO 700 C	213231	19
ELIKA PRO 700 P	213230	19
ES1/Q	226905	50
ES1/RVU	226909	50
ES2/Q	226913	50
ES2/RU	226917	50
ES2RT	226912	50
ESV45	226804	49
ESVU	226801	49
ESVUU	226806	49
FC-SC/APC	280011	110
FEB	287203	142
FHM	289888	100
FIL10	272108	65
FM OMNI	213009	10
FM_FILTER	226714	48
FRCAM32	287284	40
FRPRO EVO HD	287434	64
GCI	290030	159
GCF	289544	159

Articolo	Codice	Pagina
GW-CB	280837	156
GW-CB2	280838	156
GW-CN	280835	156
GW-CN2	280836	156
GW-CT	280833	156
GW-CT2	280834	156
GW-PL	280797	156
GW-PL2	280813	156
GW-SYB	280796	156
GW-SYB2	280814	156
GW-SYW	280798	156
GW-SYW2	280815	156
ICP/UU	223367	60
IP2	220322	147
J21B	223023	60
J31B	223024	60
JS2RT	223101	50
JSVU3	223109	49
JTD_32	287442	116
K120/FM	270271	80
K120L/B3	270885	80
K120L/xxDT	2708xxDT	80
KCPN	282647	86
KDF	282646	83
KDSR	270624	84
KDSR-M	270622	84
KDSR-S	270623	84
KFB3	270063	90
KFB4	270054	90
KFB5	270055	90
KFB5/..	270062	90
KFBU	270064	90
KFT/.	282614	89
KFT/..	282615	89
KFT/...	282616	89
KIT 1 EVO	217935	25
KIT 10 EVO	217942	26
KIT 11 EVO	217943	26
KIT 12 EVO	217944	26
KIT 13 EVO	217945	26
KIT 2 LTE	117922	25
KIT 3 EVO	217936	25
KIT 4 EVO	217937	25
KIT 6 EVO	217938	25
KIT 7 EVO	217939	25
KIT 8 EVO	217940	26
KIT 9 EVO	217941	26
KIT 9/13 R080	211319	46
KIT D-MATRIX PREMIUM	K700493	75
KIT D-MATRIX TIVUSAT	K700494	75
KIT FTA 3DG EVO 4x4	K700501	75
KIT FTA 3DG EVO 8x8	K700503	75
KIT P80APK	211308	46
KIT P85AK	211220	46
KIT PREMIUM 3DG PLUS	K700500	75
KIT SAT21601	211311	46
KIT TVSAT		
ESTENDED 3DGEVO	K700499	75
KIT TVSAT		
PLUS 3DGEVO	K700498	75
KMM	270632	87
KMS	270631	87
KMTW	270633	87
KPI5	270018	91
KP35	270017	91
KP62	270019	91
KRS-RJ	282732	100
KRX	270677	111
KRX-RC	270672	111

Articolo	Codice	Pagina
KSPL2	270679	112
KSPL4	270680	112
KSTT	270641	81
KTX	270686	111
KTX-RC	270671	111
KW20D	270049	91
KW33B	270050	91
KW33C	270053	91
KW35D	270061	91
KW35E	270059	91
KW44C	270051	91
KX125	282104	89
KX125E	282106	89
KX125NT	282105	89
LAMBDA 14 LTE	213058	16
LAMBDA 9 LTE	213057	16
LG-CR	280747	156
LG-CR2	280820	156
LG-VEC	280799	156
LG-VEC2	280822	156
LG-VES	280800	156
LG-VES2	280821	156
LP345F LTE	216270	22
LP345HV	216168	27
LP345HV LTE	216268	24
LP345MF LTE	216269	22
LP34F	216135	21
LP3F	216171	21
LP45F LTE	216249	23
LP45NF LTE	216250	23
LP4F	216151	21
LP5F LTE	216208	23
LPV345F LTE	217250	24
LPV345HV	217349	27
LTE_FILTER_48	226715	48
LTE_FILTER_59	226711	48
LTE_FILTER_60	226709	48
MAK233ILTE	223389	53
MAK2340LTE	223393	53
MAK2340LTE/..*	223390	53
MAK2340LTE/40-42	223388	53
MAK2510LTE	223387	53
MAK2640LTE	223392	53
MAK2640LTE/..*	223391	53
MAPI02	223121	53
MAPI06	223122	52
MAPI10	223196	53
MAPI11	223506	53
MAPI13LTE	223513	52
MAPI13LTE24	223516	53
MAPI13LTE700	223527	53
MAPI15LTE	223523	52
MAPI16I	223507	53
MAP201LTE	223512	53
MAP201LTE700	223526	53
MAP204LTE	223519	52
MAP206LTE	223520	52
MAP207LTE	223524	52
MAP208	223161	52
MAP210/31-33	223127	52
MAP2R3+U LTE	223703	51
MAP2R345U LTE	223714	51
MAP2R345ULTE/..	223715	51
MAP2RFM3USAT	223716	51
MAP300LTE	223521	53
MAP303/31-33	223128	52
MAP313LTE	223511	52
MAP315LTE	223522	52
MAP3R3+UU LTE	223708	51

Articolo	Codice	Pagina
MAP3R3U LTE	223707	51
MAP3R3UU 2LTE	223712	51
MAP3R3UU LTE	223709	51
MAP3RFM+3U 700	223711	51
MAP3RFM+3UU2LTE	223713	51
MAP400	223141	52
MAP401	223195	52
MAP413LTE	223510	52
MAP4R3+U LTE+	223701	51
MAP4R3U LTE+	223706	51
MAP4R3UU LTE+	223710	51
MAP4RU LTE+	223702	51
MAP4RU LTE700+	223704	51
MAP540LTE	223508	52
MAP540LTE/..	223514	52
MAP541LTE	223509	52
MAP541LTE/..	223515	52
MAP541LTE/40-42	223525	52
MBJ2r3+4+5 LTE	223609	61
MBJ2r345U LTE	223603	61
MBJ2r345U LTE/..	223604	61
MBJ2r3UU LTE	223606	61
MBJ2rFM+3UU LTE	223611	61
MBJ3r3+4+5 LTE	223608	61
MBJ3r345U LTE	223601	61
MBJ3r345U LTE/..	223602	61
MBJ3r3U LTE	223607	61
MBJ3r3UU LTE	223605	61
MBJ3rFM+3UU LTE	223610	61
MBX5540LTE	235109	62
MBX5540LTE/..	235113	62
MBX5541LTE	235111	62
MBX5710	235025	62
MBX5720	235021	62
MBX5740LTE	235108	62
MBX5740LTE/..	235112	62
MBX5741LTE	235110	62
MBX5741LTE700	235115	62
MBX5741LTEUK	235114	62
MBX5851	235016	62
MBX7740/35-36	235105	62
MBX7741	235006	62
MCP/UU	223366	60
MIN/MIN	287225	110
MINIBOOST	270025	56
MINIPOWER12	270021	54
MINIPOWER12P	270020	54
MINIPOWER24	270024	54
MINIPOWER24P	270023	54
MOD90	280001	58
MOD90R	280002	58
MOD90S	287058	59
MOD-HDTV	287400	56
MOD-HDTV MICRO	287429	56
MOD-HDTV MINI	287406	56
MX Filter 700	226716	48
MX201	223201	48
MX202	223202	48
MX203	223203	48
MX205	223217	48
MX206	223218	48
MX210	223222	48
MX210/..*	223223	48
MX211	223221	48
MXST	226400	49
NASTROZNR	287263	41
OMEGA8	213022	34
OPB18I	289403	116
OPB24IR	289404	116

Indice dei prodotti

Articolo	Codice	Pagina
OPB8I	289405	116
OPC 4 ARM	287344	110
OPC 8 ARM	287346	110
OPC 8 INDOOR	287425	110
OPCAB04	287447	110
OPCAB02	287446	110
OPCCOL	287452	110
OPCCOL48	287453	110
OPCCOL96	287454	110
OPCGC12	287448	110
OPCGC24	287449	110
OPCGC48	287450	110
OPCGC96	287451	110
OP012P	289402	116
OPT_RX-TV	270696	107
OPTATT14DB	287237	110
OPTATT3DB	287239	110
OPTATT7DB	287238	110
OPT-RX 4 MINI	270666	107
OPT-RX QUAD MINI	270665	107
OPT-RX SCD2	270664	108
OPT-RX SCD2 UK	270663	108
OPT-RX5I	270690	114
OPT-TX 1510	270667	106
OPT-TX 1530	270668	106
OPT-TX 1550	270669	106
OPT-TX 1570	270670	106
OPT-TX DT	270694	106
OPT-TX5I	270689	113
P80APN	211316	43
P85GX10-A	211217	42
P85GX10-B	211212	42
P85RX10-A	211216	42
P85RX10-B	211211	42
P85X10	211209	42
P85X10-A	211210	42
PA2	280701	148
PA3	280703	148
PA3M	tbd	144
PA3M	tbd	144
PA4	280702	148
PASM	tbd	144
PA6	280704	148
PA6M	tbd	144
PA8	280705	148
PA8M	tbd	144
Pal curva40+ATT	287258	37
Pal curva50+ATT	287259	37
PaloCB2 1.5/30	287247	37
PaloCB2 1.5/35	287248	37
PaloCB2 1.5/40	287249	37
PaloCB2 2/35	287250	37
PaloCB2 2/42	287251	37
PaloCB2 2/50	287252	37
PaloCB2 3/60	287256	37
PaloCB3 2/35	287253	37
PaloCB3 2/42	287254	37
PaloCB3 2/50	287255	37
PaloCB3 3/60	287257	37
PaloSB2 1.5/25	287244	37
PaloSB2 2/28	287245	37
PaloSB3 2/28	287246	37
PAS0021D	PAS0021D	157
PAS002331I	PAS002331I	158
PAS002341I	PAS002341I	158
PAS0032	PAS0032	157
PAS0032D	PAS0032D	157
PAS0042	PAS0042	158
PAS0042D	280793	158

Articolo	Codice	Pagina
PAS030301I	PAS030301I	49
PAS321300I	PAS321300I	159
PAS3236Q	PAS3236Q	159
PAS4004102	PAS4004102	163
PAS4004109	PAS4004109	163
PAS4004112	PAS4004112	163
PAS400711I	PAS400711I	161
PAS400910I	PAS400910I	161
PAS4016102	PAS4016102	160
PAS401710I	PAS401710I	161
PAS4025202	289700	160
PAS4037104	PAS4037104	160
PAS410711I	PAS410711I	162
PAS410910I	PAS410910I	162
PAS4116102	PAS4116102	162
PAS411710I	PAS411710I	162
PAS4136104	PAS4136104	162
PAS4304102	PAS4304102	163
PAS6106	289770	159
PAUTV	280373	159
PC8338	287398	142
PDM00	220003	154
PDM05	220002	154
PDM10	220001	154
PDM14	220004	155
PDM18	220005	155
PDM22	220006	155
PENTA85	211201	42
PENTA85-A	211205	42
PENTA85G	211203	42
PENTA85G-A	211206	42
PENTA85R-A	211207	42
PIG TAIL	287426	110
PL1	280736	156
PLC 1x16	287408	112
PLC 1x32	287409	112
PLC 1x4	287455	112
PLC 1x64	287410	112
PLC 1x8	287407	112
PMI24	287444	116
PMI48	287445	116
P060APX5	287185	41
P080SCX50	287402	43
PPI2	220370	147
PPI2DC	220375	147
PPI3	220376	147
PPI4	220390	147
PPI4DC	220392	147
PP2	220802	145
PP3	220803	145
PP4	220804	145
PP5	220805	145
PR ADAPT	287226	110
PR003	287219	109
PR005	287220	109
PR010	287221	109
PR025	287222	109
PR035	287327	109
PR050	287328	109
PR075	287329	109
PR1	290451	158
PR100	287223	109
PR11	290365	158
PR5	290454	158
PR100	280730	157
PR106	280731	157
PR110	280732	157
PR114	280733	157
PR118	280734	157

Articolo	Codice	Pagina
PRI22	280735	157
PROCAM MEDIASET	282084	75
PROCAM TIVUSAT HD	282083	75
PSUI220JA	287405	141
PSUI315TS	287375	141
PSUI340TS	287376	141
PSUI506	287155	140
PSU2032	287423	140
PSU3001	271160	139
PSU3001/UK	271159	139
PSU342	289564	54
PSU412	289562	54
PSU511	289851	54
PT100AC	289293	44
PT100C	289291	44
PUI6F	217436	28
PU4AF	217423	28
PU4F	217424	28
PU8F	217428	28
PULL CONN	287224	110
PV10	210011	41
PVP	210002	41
RACK01	289708	104
RACK02	289709	104
RACK03	289710	104
RACK04	289711	104
RACK05	289712	104
RACK06	289713	104
RACK07	289714	104
RACK08	289715	104
RACK09	289716	104
RACK10	289717	104
RACK11	289718	104
RACK27U	289721	104
RACK42U	289722	104
RACK6U	289720	104
RALLATRIS	287289	41
RO100ACX6	289299	44
RO100APX5G	289830	44
RO120N	289197	44
RO125APX3G	289832	44
RO150	289139	44
RO60APX400	287186	43
RO60AX10	280610	43
RO80APX200	289283	43
RO80APX50	289479	43
RO85APX5G	289828	43
RO85AS	287411	43
SCD2-16LNB	287421	45
SCD2-32IF	271130	134
SCD2-32IF SSA	271138	134
SCD2-4216	271129	131
SCD2-4216UK	271137	131
SCD2-4416ADP	271169	132
SCD2-4416ADP UK	271168	132
SCD2-5216W	287436	133
SCD2-5416W	287412	133
SCD2-5816	287435	133
SCP3	287399	142
SI2	220872	146
SI3	220873	146
SI4	220874	146
SIG7100	283949	94
SIG7120	283950	98
SIG7121	283953	98
SIG7281	283933	96
SIG7282	283943	96
SIG7282S	283944	96
SIG7330	283954	94

Articolo	Codice	Pagina
SIG7340	283955	94
SIG7404H	287348	99
SIG7531	283952	92
SIG7540	283951	92
SIG7600-HTX	270678	102
SIG7622	270687	103
SIG7624	270688	103
SIG7710	283945	100
SIG7720	283947	101
SIG7730	283946	100
SIG7804H264	287430	99
SIG7901	283930	103
SIG9506	283126	76
SIG9708CI	283141	78
SIGMA 6HD	213201	36
SIGMA 6HD LTE	213219	17
SIGMA 8HD LTE	213213	17
SIGMA COMBO LTE	213223	20
SIGMA V2 HD	213203	13
SIGMA6HD LTE700	213224	17
SP1	290351	158
SP5	290354	158
SPF00	220721	154
SPF05	220722	154
SPF10	220723	154
SPF14	220724	154
SPF18	220725	154
SPF22	220726	154
SPI00	220711	153
SPI05	220712	153
SPI10	220713	153
SPI14	220714	153
SPI18	220715	153
SPI22	220716	153
SPS1750	289087	140
SPTR2	287305	150
SPTR3	287307	150
SPTR4	287306	150
SPTR6	287308	150
SPTR8	287309	150
STM1	281801	41
STOA 2 Preco	287443	116
STOA 4	287420	116
STOA 4 Preco	287440	116
SUPCURVO180G	287267	41
SUPMUR026	287265	41
SUPMUR046	287266	41
SUPP VOV/VOT	287240	110
SUPUNIVERSAL	287264	41
SWA1730TS	287374	138
SWA5122	271035	137
SWA5414	271036	137
SWA5424	271034	137
SWA930TS	287373	138
SW11308TS	287365	129
SW11312TS	287366	129
SW11316TS	287367	129
SW11401B	271072	122
SW11708TS	287368	130
SW11712TS	287369	130
SW11716TS	287370	130
SW11724TS	287371	130
SW11732TS	287372	130
SW14404-00	271081	123
SW14404-08	271082	123
SW14404-17	271083	123
SW14406-00	271084	123
SW14406-08	271085	123
SW14406-17	271086	123

Articolo	Codice	Pagina
SW14408-00	271087	123
SW14408-08	271088	123
SW14408-17	271089	123
SW14508DT	271148	118
SW14512DT	271149	118
SW14516DT	271150	118
SW14524DT	271151	118
SW14532DT	271152	118
SW15045A	271161	124
SW15065A	271162	124
SW15085A	271163	124
SW18508PLUS	271055	125
SW18512PLUS	271056	125
SW18516PLUS	271063	125
SW18524STPLUS	271057	126
SW18532STPLUS	271058	126
SW185SPL2	271096	142
SW185T15	271095	142
SW18908PLUS	271067	127
SW18912PLUS	271068	127
SW18916PLUS	271069	127
SW1908TS	287360	128
SW1912TS	287361	128
SW1916TS	287362	128
SW1924TS	287363	128
SW1932TS	287364	128
SWM1305A	271000	125
SWP1708TS	287355	121
SWP1712TS	287356	121
SWP1716TS	287357	121
SWP1724TS	287358	121
SWP1732TS	287359	121
SWP508QD	271164	119
SWP512QD	271165	119
SWP516QD	271166	119
SWP908TS	287350	120
SWP912TS	287351	120
SWP916TS	287352	120
SWP924TS	287353	120
SWP932TS	287354	120
T75IF	290002	159
TAPS110	287310	151
TAPS115	287311	151
TAPS120	287312	151
TAPS212	287313	151
TAPS215	287314	151
TAPS220	287315	151
TAPS412	287316	152
TAPS415	287317	152
TAPS420	287318	152
TAPS616	287319	152
TAPS620	287320	152
TAPS816	287321	153
TAPS820	287322	153
TAU LTE KILLER	213103	14
TAU LTE KILLER+	213104	14
TAU11/4	213096	32
TAU11/45	213101	32
TAU11/5	213097	32
TAU15/4	213094	33
TAU15/45	213100	33
TAU15/5	213095	33
TDT 12	287419	116
TDT_32	287441	116
TEGOLAPIOMBO	287293	41
TEGOLAPVC	287292	41
TEL15/4	287243	37
TEL2/4	287241	37
TEL2/6	287242	37

Articolo	Codice	Pagina
TENDIFILO	287290	41
TERZA 6HD	213008	11
TF90	289543	159
TPE	282733	104
UX-MBQD6	287141	45
UX-MBS6	287139	45
UX-MBTW6	287140	45
UX-OCTO LTE	287340	45
UX-QD LTE	287339	45
UX-QT LTE	287302	45
UX-S LTE	287337	45
UX-TW LTE	287338	45
VI-80	280750	156
VI-802	280809	156
VI-ARK2-B	287304	156
VI-ARK2-W	287303	156
VI-ARK-B	287331	156
VI-ARK-W	287330	156
VI-EKB	289741	155
VI-EKB2	289742	155
VI-EKN	289798	155
VI-EKN2	289799	156
VI-EKW	280839	155
VI-EKW2	280840	155
VI-ID	280749	155
VI-ID2	280810	155
VI-IDB	280748	156
VI-IDB2	280811	156
VI-PL	280751	156
VI-PL2	280812	156
VI-PLS	287121	156
VI-PLS2	287122	156
VOT1/2	287215	109
VOT2/3	287216	109
VOT3/4	287217	109
VOT70/30	287212	109
VOT80/20	287213	109
VOT90/10	287214	109
VOV2	287210	109
VOV4	287211	109
WDM 2	287343	113
ZN3PREG	287272	38
ZNCAMINO	287287	40
ZNECON010	287279	39
ZNECON05	287331	39
ZNESPT010	287268	38
ZNESPT015	287269	38
ZNESPT020	287270	38
ZNESPTU10	287260	38
ZNESPTU15	287261	38
ZNESPTU20	287262	38
ZNFRCAMNEW28	287285	40
ZNMURO	287288	40
ZNPMECOONO	287274	38
ZNPMEMILIA	287273	38
ZNRINF	287275	39
ZNRINF10	287277	39
ZNRINF20	287278	39
ZNRINF5	287276	39
ZNRING	287271	38
ZNSOLAI	287283	40
ZNTELE20	287332	39
ZPL-R450	287180	41
ZPL-R650	287179	41

Note

[illegible]