

## FM Double & Triple Cavity Filters

DCF 500                      DCF 2000  
 DCF 5000                    TCF 3000

These high quality Cavity Filters are one-quarter wavelength coaxial cavities designed for the 87,5 ÷ 108 MHz band. They are band pass double cavities to be installed between the transmitter and the antenna, to drastically reduce spurious signals and any other intermodulation product.

The DCF is a double filter and the TCF is a triple filter, all of them with rotating loops allowing easy tuning of the circuit for a different sideband attenuation and with a variable coupling.

CODE	MODEL	DESCRIPTION
F210	DCF 500	Double cavity filter, 800 W Power rate per channel IN/OUT N
F211	DCF 2000	Double cavity filter, 2 KW Power rate per channel IN/OUT 7/16"
F212	DCF 5000	Double cavity filter, 5 KW Power rate per channel IN/OUT 7/8"
F679	TCF 3000	Triple cavity filter, 3000 W Power rate per channel IN/OUT 7/8"
AVAILABLE OPTIONS	Different Input and Output connector	



### Technical data

SPECIFICATIONS	DCF 500	DCF 2000	DCF 5000	TCF 3000
Rf output power	800	2000	5000	3000
Input Connector	N	7/16	7/8	7/8
Output Connector	N	7/16	7/8	7/8
Weight	10 Kg	18 Kg	37 Kg	25 Kg
Minimum Frequency Spacing	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz
Typical Insertion loss	< 0,4 dBd	< 0,3 dBd	< 0,2 dBd	from 0,3 to 0,8 dBd
Frequency Range	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz
Input Impedance	50 Ohm	50 Ohm	50 Ohm	50 Ohm
VSWR	≤ 1.15:1	≤ 1.15:1	≤ 1.15:1	≤ 1.15:1
Internal parts	Silver-plated brass and PTFE	Silver-plated brass and PTFE	Silver-plated brass and PTFE	Silver-plated brass and PTFE
External parts	Aluminium	Aluminium	Aluminium	Aluminium
Colour	Black	Black	Black	Black
Temperature operating range	From -10°C to +50°C	From -10°C to +50°C	From -10°C to +50°C	From -10°C to +50°C

## FM Double Bridge Combiners & FM Star Point Combiners in rack Slide

M2F4N

M3F4N

M4F4N

M2F4N/P

M3F4N/P

M4F4N/P

The “Starpoint” combining filters are carefully calibrated at our laboratories onto any frequency figures required by the customer. Even with 100% modulation, they assure an effective separation for adjacent frequencies up to 1,3 MHz. The multi-program models are designed in one modular mechanical structure which can house up to four identical band pass Coaxial Cavity filters, type M1F4. In these configurations, the output power figures of the filters are combined through rigid lines which are part of the unit and can be adjusted at 2, 3, 4, 5, 6, 7, 8 Narrow band inputs by means of easy operations.

The “Double Bridge” combining filters allow easy changes to new figures of the operating frequencies. With 100% modulation, they can satisfactorily separate two adjacent frequencies up to 0,6 MHz distance. The multi-program models are designed in one modular mechanical structure which can house up to two identical band pass filters, type M1F4 in Double Bridge Configuration.

They are composed by two different Double Cavity Filters and two Hybrid Couplers, including a Narrow Band and Wide Band input lines



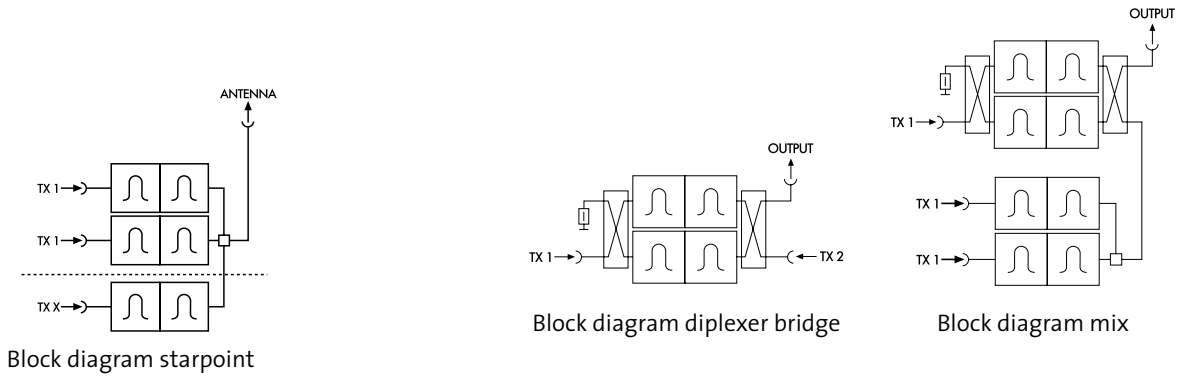
On request, up to eight different transmitters can be combined to a common transmission antenna with the same technology.

To deliver two reflected and direct monitories at a preset level of -50 dB, a directional coupler is assembled at the output of the combiner.

CODE	MODEL	DESCRIPTION
100252	M5F4R	500 W/ch Pentaplexer Starpoint Combiner heads., Out 7/8
100226	M5F4N	100 W/ch Pentaplexer Starpoint Combiner, Out 7/16
100227	M4F4R	500 W/ch Quadriplexer Starpoint Combiner heads. Out 7/8
100229	M2F4R	500 W/ch Diplexer Starpoint Combiner heads., Out 7/16
100241	M6F4R/P	500 W/ch Esaplexer Bridge Combiner heads., Out 7/8
100225	M5F4R-P	500 W/ch Pentaplexer Bridge Combiner heads., Out 7/8
100251	M4F4R/P	500 W/ch Quadriplexer Bridge Combiner heads., Out 7/8
AVAILABLE OPTIONS	Different Input and Output connector	

## Technical data

Frequency Range	87,5 ÷ 108 MHz	External parts	Aluminium
Input Impedance	50 Ohm	Colour	Black
VSWR	≤ 1.2:1	Temperature operating range	From -10°C to +50°C
Decoupling between Input port	28 dB	Dimensions (W x H X D) mm	482 x 310 (7 Unit) x 578 up to 4 Channel 482 x 620 (14 Unit) x 578 from 5 to 8 Channel
Internal parts	Silver-plated brass and PTFE		



SPECIFICATIONS	M2F4N	M4F4N	M2F4Q	M4F4Q	M2F4R	M4F4R
Rf output power	100	100	300	300	500	500
Input Connector	N	N	N	N	N	N
Output Connector	N	N	N	7/16	7/16	7/8
Weight	18 Kg	25 Kg	19 Kg	26 Kg	20 Kg	27 Kg
Minimum Frequency Spacing	2,0 MHz	2,0 MHz	1,4 MHz	1,4 MHz	0,7 MHz	0,7 MHz
Typical Insertion loss	< 0,65 dBd	< 0,65 dBd	< 0,9 dBd	< 0,9 dBd	< 1,4 dBd	< 1,4 dBd
Minimum Frequency Spacing	4,0 MHz	3,0 MHz	2,0 MHz	1,6 MHz	1,3 MHz	0,6 MHz
Max operating Power	500	500	500	350	200	not available



SPECIFICATIONS	M2F4N/P	M4F4N/P	M2F4Q/P	M4F4Q/P	M2F4R/P	M4F4R/P
Rf output power	100	100	300	300	500	500
Input Connector	N	N	N	N	N	N
Output Connector	N	N	N	7/16	7/16	7/8
Weight	20 Kg	27 Kg	21 Kg	28 Kg	22 Kg	30 Kg
Minimum Frequency Spacing	2,0 MHz	2,0 MHz	1,4 MHz	1,4 MHz	0,7 MHz	0,7 MHz
Typical Insertion loss	< 0,65 dBd	< 0,65 dBd	< 0,9 dBd	< 0,9 dBd	< 1,4 dBd	< 1,4 dBd
Minimum Frequency Spacing	4,0 MHz	3,0 MHz	2,0 MHz	1,6 MHz	1,3 MHz	0,6 MHz
Max operating Power	1000	1000	700	500	400	300

## FM Double Bridge Combiners

DPX 1000  
TLX 500

DPX 2000  
TLX 2000

DPX 5000  
TLX 5000

The “Double Bridge” combining filters allow easy changes to new figures of the operating frequencies. With 100% modulation, they can satisfactory separate two adjacent frequencies up to 2 MHz. They are composed of two different double cavity filters and

two hybrid couplers, including a narrow band and wide band input lines.

Combining systems for special purposes are available on request.

CODE	MODEL	DESCRIPTION
F247	DPX 1000	Diplexer 800 W Power rate per channel, IN N, OUT 7/16”
F248	DPX 2000	Diplexer 2 KW Power rate per channel, IN 7/16”, OUT 7/8”
F248.01	DPX 2000	Diplexer 2 KW Power rate per channel, IN 7/8”, OUT 1-5/8”
F249	DPX 5000	Diplexer 4 KW Power rate per channel, IN 7/8” , OUT 1-5/8”
F252	TLX 500	Triplexer 800 W power rate per channel, IN N, OUT 7/8”
F253	TLX 2000	Triplexer 2 KW power rate per channel, IN 7/16”, OUT 1-5/8”
F254	TLX 5000	Triplexer 4 KW power rate per channel, IN 1-5/8” , OUT 3-1/8”
AVAILABLE OPTIONS	Different Input and Output connector - Triple cavity	



SPECIFICATIONS	DPX 1000	TLX 1000	DPX 2000	TLX 2000	DPX 5000	TLX 5000
Rf output power	800	800	2000	2000	4000	5000
Input Connector	N	N	7/16	7/16	7/8	1-5/8
Output Connector	7/16	7/8	7/8	1-5/8	1-5/8	3-1/8
Weight	28 Kg	56 Kg	58 Kg	122 Kg	107 Kg	230 Kg
Minimum Frequency Spacing	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz
Typical Insertion loss	< 0,6 dBd	< 0,6 dBd	< 0,5 dBd	< 0,4 dBd	< 0,5 dBd	< 0,4 dBd
Isolation Between Channels	> 30 dB	> 30 dB	> 35 dB	> 35 dB	> 35 dB	> 35 dB
Frequency Range	87,5 ÷ 108 MHz					
Input Impedance	50 Ohm					
VSWR	≤ 1.2:1					
Internal parts	Silver-plated brass and PTFE					
External parts	Aluminium					
Colour	Black					
Temperature operating range	From -10°C to +50°C					

## FM Starpoint Combiners

DSX 1000  
TTX 500

DSX 2000  
TTX 2000

DSX 5000  
TTX 5000

The “Starpoint” combining filters are carefully calibrated at our laboratories onto the frequency figures required by the customer. Even at 100% modulation, they assure an effective separation for adjacent frequencies up to 2 MHz. They are composed

of two or more coaxial cavity filters connected to rigid lines, each of them equipped with narrow band input lines. Combining systems for special purposes are available on request.

CODE	MODEL	DESCRIPTION
F255	DSX 1000	Diplexer 800 W power rate per channel, IN N, OUT 7/16”
F256	DSX 2000	Diplexer 2 KW power rate per channel, IN 7/16”, OUT 7/8”
F257	DSX 5000	Diplexer 4 KW power rate per channel, IN 7/8” , OUT 1-5/8”
F271	TTX 500	Triplexer 800 W power rate per channel, IN N, OUT 7/8”
F272	TTX 2000	Triplexer 2 KW power rate per channel, IN 7/16”, OUT 1-5/8”
F273	TTX 5000	Triplexer 4 KW power rate per channel, IN 1-5/8” , OUT 3-1/8”
F625	QPX 500	Quadriplexer 500 W power rate per channel, IN N, OUT 7/8”
F625.01	QPX 250	Quadriplexer 250 W power rate per channel, IN N, OUT 7/16”
F625.02	QPX 100	Quadriplexer 100 W power rate per channel, IN/OUT N
F626	QPX 1000	Quadriplexer 1 KW power rate per channel, IN 7/16”, OUT 1-5/8”
AVAILABLE OPTIONS	Different Input and Output connector - Triple cavity	



SPECIFICATIONS	DSX 1000	TTX 500	QPX 1000	DSX 2000	TTX 2000	QPX 250	DSX 5000	TTX 5000	QPX 500	QPX 1000
Rf output power	800	800	100	2000	2000	250	5000	5000	500	1000
Input Connector	N	N	N	7/16	7/16	N	7/8	1-5/8	N	7/16
Output Connector	7/16	7/8	N	7/8	1-5/8	7/16	1-5/8	3-1/8	7/8	1-5/8
Weight	23 Kg	40 Kg	45 Kg	42 Kg	60 Kg	46 Kg	80 Kg	120 Kg	47 Kg	80 Kg
Minimum Frequency Spacing	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz	2,2 MHz
Typical Insertion loss	< 0,6 dBd	< 0,6 dBd	< 0,5 dBd	< 0,5 dBd	< 0,4 dBd	< 0,4 dBd	< 0,4 dBd	< 0,4 dBd	< 0,4 dBd	< 0,4 dBd
Isolation Between Channels	> 30 dB	> 30 dB	> 35 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB	> 40 dB
Frequency Range	87,5 ÷ 108 MHz									
Input Impedance	50 Ohm									
VSWR	≤ 1.2:1									
Internal parts	Silver-plated brass and PTFE									
External parts	Aluminium									
Colour	Black									
Temperature operating range	From -10°C to +50°C									

# FM Dipole Antennas

## PLS 1

### DIP 11

### DIP 15

These dipole antennas model DIP-15, are rugged broadband aerials especially designed for arrays composed of several elements. The dipole is made of hot galvanized steel to provide high corrosion resistance, for a lifetime duration and operation in any climate conditions.

A thick internal ground connection across the feeding line assures heavy duty service and protection in case of lightning. The design of the internal lines and the

PTFE insulator provide reliability and long lasting operation for power ratings up to 1500 W on the DIP 11 model, and up to 5000 W on the DIP 15 model.

The aluminium dipole PLS 1 model is a smart, effective and budget solution . An accurate testing process is carried out at factory on each of these dipoles to control the compliance to all the stated figures.

CODE	MODEL	DESCRIPTION
F033.01	PLS1	Aluminium Dipole, 600 W Power rate
F204	DIP11/N	Hot Galvanized steel Dipole, 600 W Power rate
F204.01	DIP11/16	Hot Galvanized steel Dipole, 1,5 KW Power rate
F204.02	DIP11/F	Hot Galvanized steel Dipole, 1,5 KW Power rate
F202.01	DIP15/16	Hot Galvanized steel Dipole, 2 KW Power rate
F202	DIP15/F	Hot Galvanized steel Dipole, 5 KW Power rate



SPECIFICATIONS	PLS 1	DIP 11	DIP 15
RF input power	600 W	1500 W	5000 W
Input Connector	N	N - 7/16 - 7/8	N - 7/16 - 7/8
Polarization	Vertical	Vertical	Vertical
Weight	4 Kg	7 Kg	16 Kg
Gain (Referred to Half-Wave Dipole)	2 dB	2 dB	2 dB
H Plane - V Plane	180° - 78°	180° - 78°	180° - 78°
Max Wind Velocity	150 Km/h	150 Km/h	150 Km/h
Wind Load (with speed at 150Km/h)	10 Kgs.	18 Kgs.	25 Kgs.
Wind Surface	0,11 SQM	0,11 SQM	0,18 SQM
Frequency Range	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz
Input Impedance	50 Ohm	50 Ohm	50 Ohm
VSWR	≤ 1.4:1	≤ 1.4:1	≤ 1.4:1
Internal parts	Silver-plated brass and PTFE		
External parts	Aluminium	Hot Galvanized steel	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.		
Dimensions (W x H X D) mm	60 x 1400 x 850	60 x 1400 x 850	100 x 1340 x 910

# FM Dipole Circular Polarization Antennas

PLC 4            PLC 4/H  
PLC 5

These stainless steel antennas have been designed to obtain circularly polarized radiation patterns, for low and medium output power FM Radio transmitters. For easy and low cost transportation, the PLC4 models

are disassembled and packed.

The PLC 5 model is factory tuned onto any channels within 87.5 - 108 MHz according to the customer's requests.

CODE	MODEL	DESCRIPTION
F455.01	PLC4/N	Double-crossed Dipole Stainless steel, 600 W Power rate
F455	PLC4/16	Double-crossed Dipole Stainless steel, 1.5 KW Power rate
F455.02	PLC4/F	Double-crossed Dipole Stainless steel, 1.5 KW Power rate
F524.01	PLC4/H/16	Double-crossed Dipole Stainless steel, 2 KW Power rate
F524	PLC4/H/F	Double-crossed Dipole Stainless steel, 3 KW Power rate
F540	PLC5/N	Tuned Dipole Narrow Band Stainless steel, 600 W Power rate
<b>AVAILABLE OPTIONS</b>	F680 - Reflector for Double-Cross Dipole model PLC4 F681 - Reflector for Double-Cross Dipole model PLC4/H	



SPECIFICATIONS	PLC 4	PLC 4R	PLC 5
Rf output power	600 – 1500 - 3000 W	600 – 1500 - 3000 W	1500 W
Input Connector	N – 7/16 – 7/8	N - 7/16 - 7/8	N
Polarization	Circular	Circular	Circular
Weight	12 Kg	14 Kg	4 Kg
Gain (Referred to Half-Wave Dipole)	-1.5 dB	0 dB	-1.5 dB
H Plane - V Plane	Omnidirectional	Omnidirectional	270° - 330°
Max Wind Velocity	150 Km/h	150 Km/h	150 Km/h
Wind Load (with speed at 150Km/h)	45 Kgs.	45 Kgs.	25 Kgs.
Wind Surface	0,1 SQM	0,1 SQM	0,09 SQM
Frequency Range	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz
Input Impedance	50 Ohm	50 Ohm	50 Ohm
VSWR	≤ 1.4:1	≤ 1.4:1	≤ 1.4:1
Internal parts	Silver-plated brass and PTFE		
External parts	Hot Galvanized steel		
Mounting	From 60 to 120 mm diam.		
Dimensions (W x H X D) mm	1240 x 1520 x 1150	1240 x 1520 x 1150	580 x 850 x 350

# FM Dipole Panel Antennas

## APL 1

## APL 5

These advanced and hot galvanized steel panel antennas are successfully used in high power antenna system arrays.

The standard application of the APL 1 panel antenna is to be mounted on one side of the transmitting tower for radiating systems with directional coverage.

When a circular pattern on a vast area should be

achieved, more APL5 model antennas can be mounted in correspondance of the four sides of the transmitting tower.

An accurate testing process is carried out at factory on each antenna to control the compliance to all the stated figures.

CODE	MODEL	DESCRIPTION
F203.01	APL5/16	Double Dipole Panel Galvanized steel, 2KW Power rate
F203	APL5/F	Double Dipole Panel Galvanized steel, 5KW Power rate
F510	APL1/16	Dipole Panel Galvanized steel, 2KW Power rate
F510.01	APL1/F	Dipole Panel Galvanized steel, 5KW Power rate
F510.02	APL1/N	Dipole Panel Galvanized steel, 600W Power rate



SPECIFICATIONS	APL 1	APL 5
Rf output power	600 – 1500 W	2000 - 5000 W
Input Connector	N – 7/16 – 7/8	7/16 – 7/8
Polarization	Vertical ( or Horizontal )	Vertical ( or Horizontal )
Weight	23 Kg	45 Kg
Gain (Referred to Half-Wave Dipole)	6 dB	7,5 dB
H Plane - V Plane	130 ° - 73 ° (78 ° - 160 °)	57 ° - 73 °
Max Wind Velocity	225 Km/h	225 Km/h
Wind Load (with speed at 150Km/h)	110 Kgs.	140 Kgs.
Wind Surface	0,46 SQM	0,65 SQM
Frequency Range	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz
Input Impedance	50 Ohm	50 Ohm
VSWR	≤ 1.4:1	≤ 1.4:1
Internal parts	Silver-plated brass and PTFE	Silver-plated brass and PTFE
External parts	Hot Galvanized steel	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.	From 60 to 120 mm diam.
Dimensions (W x H X D) mm	2000 x 1280 x 850	2000 x 1280 x 850

## FM & VHF Directional Antennas

### ADR 3

### ADR 5

These Broadband directional antennas are available in two versions with 3 or 5 elements. They are made of hot galvanized steel and are especially designed for medium and high output power transmitters.

The robust design of these antennas make them suitable for any climate conditions and lifetime duration. High quality and selected materials have

been used in any details: all insulators are made of PTFE and the screws are stainless steel. The metallic parts are electrically grounded.

The ADR 3 model is also available for 140-174 Mhz band and 174 – 215 Mhz.

These aerials can be disassembled in two parts, thus allowing lower freighting costs.

CODE	MODEL	DESCRIPTION
F022	ADR3/N	3 Elements galvanized steel Yagi, 600W Power rate
F022.01	ADR3/16	3 Elements galvanized steel Yagi, 1,5kW Power rate
F022.02	ADR3/8	3 Elements galvanized steel Yagi, 1,5kW Power rate
F022.05	ADR5/N	5 Elements galvanized steel Yagi, 600W Power rate
F022.04	ADR5/16	5 Elements galvanized steel Yagi, 1,5KW Power rate
F022.06	ADR5/F	5 Elements galvanized steel Yagi, 1,5kW Power rate



SPECIFICATIONS	ADR 3	ADR 5
Rf output power	600 – 1500 W	600 – 1500 W
Input Connector	N – 7/16 – 7/8	N – 7/16 – 7/8
Polarization	Vertical	Vertical
Weight	10 Kg	17 Kg
Gain (Referred to Half-Wave Dipole)	5 dB	6,5 dB
H Plane - V Plane	118 ° - 70 °	118 ° - 70 °
Max Wind Velocity	200 Km/h	200 Km/h
Wind Load (with speed at 150Km/h)	21,5 Kgs.	32 Kgs.
Wind Surface	0,19 SQM	0,30 SQM
Frequency Range	87,5 ÷ 108 MHz	87,5 ÷ 108 MHz
Input Impedance	50 Ohm	50 Ohm
VSWR	≤ 1.4:1	≤ 1.4:1
Internal parts	Silver-plated brass and PTFE	Silver-plated brass and PTFE
External parts	Hot Galvanized steel	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.	From 60 to 120 mm diam.
Dimensions (W x H X D) mm	1250 x 1800 x 60	1850 x 1800 x 70

## UHF Directional Antennas

CRF 400

CRF 401

CRF 402

These broadband antennas are designed to connect the studio of the broadcasting station to the repeater site: the antenna provides excellent gain figures and directivity.

The rugged construction makes the CRF400 model

suitable even in very severe climate conditions and for lifetime duration.

It can be completely disassembled for lower freighting costs.

CODE	MODEL	DESCRIPTION
F331.02	CRF402	Corner Reflector type, 200-250 MHz, 10 dB gain
F331.01	CRF401	Corner Reflector type, 300-360 MHz, 10 dB gain
F331	CRF400	Corner Reflector type, 380-530 MHz, 10 dB gain



SPECIFICATIONS	CRF 400	CRF 401	CRF 402
Rf output power	150	150	150
Input Connector	N	N	N
Polarization	Vertical ( or Horizontal )	Vertical ( or Horizontal )	Vertical ( or Horizontal )
Weight	5 Kg	6.5 Kg	8.5 Kg
Gain (Referred to Half-Wave Dipole)	9 dB	9 dB	9 dB
H Plane - V Plane	44° - 67°	44° - 67°	44° - 67°
Max Wind Velocity	180 Km/h	180 Km/h	200 Km/h
Wind Load (with speed at 150Km/h)	11 Kgs.	14 Kgs.	17 Kgs.
Wind Surface	0,11 SQM	0,15 SQM	0,20 SQM
Frequency Range	380 ÷ 530 MHz	300 ÷ 360 MHz	200 ÷ 250 MHz
Input Impedance	50 Ohm	50 Ohm	50 Ohm
VSWR	≤ 1,5:1	≤ 1,5:1	≤ 1,5:1
Internal parts	Silver-plated brass and PTFE	Silver-plated brass and PTFE	Silver-plated brass and PTFE
External parts	Hot Galvanized steel	Hot Galvanized steel	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.	From 60 to 120 mm diam.	From 60 to 120 mm diam.
Dimensions (W x H X D) mm	1140 x 750 x 500	1450 x 950 x 700	2150 x 1700 x 1100

## Parabolic Antennas

### PRB 60      PRB 120      PRB 180

Designed and realized to be used in the frequency band for radio link systems, these reflectors guarantee high directivity and high front to back ratio.

The perfect parabolic mirror is realized by means of a new advanced technology capable of assuring a very accurate mechanical construction.

Each type of antenna can be equipped with a fiberglass radome, to protect the illuminator.

The radome introduces a very limited attenuation and has no influence on the front to back ratio.

The antenna is also equipped with a metal shroud.

The parabolic dish can be equipped with different type of illuminators for several frequency bands, and for single or double polarization.

The range between 1.4Ghz to 23 GHz is approved by English body DTI class 3.

CODE	MODEL	DESCRIPTION
F675	PRB60/P	Parabolic Antenna 60 cm., Yagi feeder, 1.4-2.8 GHz
F682	PRB120/P	Parabolic Antenna 120 cm, Yagi feeder, 1.4-2.8 GHz
F677	PRB180/P	Parabolic Antenna 180 cm, Yagi feeder, 1.4-2.8 GHz
F652	PRB60/H	Parabolic Antenna, 60 cm. diameter, with mounting kit
F651	PRB120/H	Parabolic Antenna, 120 cm. diameter, with mounting kit
F655.01	ILM 5-7/60	Feeders for 60 cm. diameter Parabolic Frequency 5-7Ghz
F655.02	ILM 5-7/120	Feeders for 120 cm. diameter Parabolic Frequency 5-7Ghz
F652.02	ILM 10-15/60	Feeders for 60 cm. diameter Parabolic Frequency 10-15Ghz
F655	ILM 10-15/120	Feeders for 120 cm. diameter Parabolic Frequency 10-15Ghz
<b>AVAILABLE OPTIONS</b>	Radome fiber glass for Parabolic, Diameters up to 300 cm.	



SPECIFICATIONS	PRB 60	PRB 60/P	PRB 60/H
Type	Yagi	Yagi or Waveguide	Yagi or Waveguide
Input Connector	N - PBR	N - PBR	N - PBR
Accuracy construction	± 0,5 mm	± 0,5 mm	± 0,5 mm
Adjustment of polarization	360 °	360 °	360 °
Max Wind Velocity	150 Km/h	150 Km/h	150 Km/h
Adjustment azimuth and elevation	± 10 °	± 10 °	± 10 °
Dimensions (W x H X D) mm	60, 120, 180 mm diam.	60, 120, 180 mm diam.	60, 120, 180 mm diam.

FREQUENCY RANGE	DIAMETER	TYPE	GAIN	VSWR MAX	HALF POWER BEAMWIDTH (°)	FRONT TO BACK RATIO
900 ÷ 1500 MHz	60	Yagi feed-horn	16,5	>16	25,6	>25
900 ÷ 1500 MHz	120	Yagi feed-horn	22,5	>16	14,1	>26
900 ÷ 1500 MHz	180	Yagi feed-horn	26	>16	9,3	>26
1400 ÷ 2500 MHz	60	Yagi feed-horn	20,2	>19	20,5	>30
1400 ÷ 2500 MHz	120	Yagi feed-horn	26,2	>19	10,2	>32
1400 ÷ 2500 MHz	180	Yagi feed-horn	29,2	>19	6,9	>34
6900 ÷ 9000 MHz	60	Waveguide	32,1	>22	5,3	>42
6900 ÷ 9000 MHz	120	Waveguide	38,2	>22	2,7	>45
6900 ÷ 9000 MHz	180	Waveguide	41,7	>22	1,8	>48
10000 ÷ 15000 MHz	60	Waveguide	36,1	>22	3,2	>41
10000 ÷ 15000 MHz	120	Waveguide	42,2	>22	1,6	>47
10000 ÷ 15000 MHz	180	Waveguide	45,7	>22	1,09	>50
10000 ÷ 15000 MHz	60HP	Waveguide	38,2	>23	2,6	>72
15000 ÷ 18000 MHz	60HP	Waveguide	40	>25	2,4	>72
21000 ÷ 23800 MHz	60HP	Waveguide	41,2	>25	1,8	>72

## FM Power Dividers

### PD 2 PD 3 PD 4 PD 6 PD 8

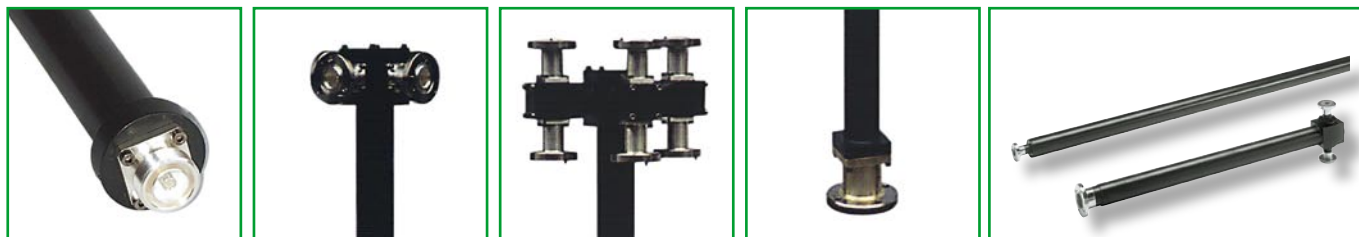
These power dividers are available for any RF output power with 50 Ohm Impedance (or 75 ohm on request). They can be supplied with any connector or flange, according to user requirements and for every need regarding the number of outputs.

All the power dividers are broadband from 87,5 to 108 Mhz and 22 Mhz bandwidth.

The typical insertion loss is better than 0,2 dB with VSWR <1,2.

Our power dividers are made in silver-plated brass with insulator in PTFE and O-RING type washers; the body of the device is treated and covered by a special paint for lifetime duration in any climate conditions.

Power dividers for other frequency ranges are available upon request.



CODE	DESCRIPTION	INPUT CONNECTOR	OUTPUT CONNECTOR	MAX INPUT POWER (W)	STEPS
2 - WAY POWER DIVIDER FM (87,5 -108 Mhz)					
F038	PD2 - N/N 2 ways	N	N	800	1
F531.01	PD2 - S/S 2 ways	7/16	7/16	2.000	1
F536.01	PD2 - F/F 2 ways	7/8"	7/8"	4.000	2
F531	PD2 - S/N 2 ways	7/16	N	1.600	1
F536.02	PD2 - F/N 2 ways	7/8"	N	1.600	2
F536	PD2 - F/S 2 ways	7/8"	7/16	4.000	2
F206.01	PD2 - Y/S 2 ways	1-5/8"	7/16	4.000	2
F206	PD2 - Y/F 2 ways	1-5/8"	7/8"	8.000	2
F206.03	PD2 - Z/Y 2 ways	3-1/8"	1-5/8"	20.000	2
3 - WAY POWER DIVIDER FM (87,5 -108 Mhz)					
F520	PD3 - N/N 3 ways	N	N	800	1
F534.01	PD3 - S/S 3 ways	7/16	7/16	2.000	1
F534.06	PD3 - F/F 3 ways	7/8"	7/8"	4.000	2
F534	PD3 - S/N 3 ways	7/16	N	2.000	1
F534.03	PD3 - F/N 3 ways	7/8"	N	2.400	2
F534.05	PD3 - F/S 3 ways	7/8"	7/16	4.000	2
F534.07	PD3 - Y/S 3 ways	1-5/8"	7/16	6.000	2
F534.08	PD3 - Y/F 3 ways	1-5/8"	7/8"	10.000	2
4 - WAY POWER DIVIDER FM (87,5 -108 Mhz)					
F039.01	PD4 - N/N 4 ways	N	N	800	1
F040.03	PD4 - S/S 4 ways	7/16	7/16	2.000	2
F336.01	PD4 - F/F 4 ways	7/8"	7/8"	4.000	2
F040	PD4 - S/N 4 ways	7/16	N	2.000	2
F533	PD4 - F/N 4 ways	7/8"	N	3.200	2
F533.01	PD4 - F/S 4 ways	7/8"	7/16	4.000	2
F207.01	PD4 - Y/S 4 ways	1-5/8"	7/16	8.000	2
F207	PD4 - Y/F 4 ways	1-5/8"	7/8"	10.000	2
6 - WAY POWER DIVIDER FM (87,5 -108 Mhz)					
F486.01	PD6 - N/N 6 ways	N	N	800	2
F486.07	PD6 - S/S 6 ways	7/16	7/16	2.000	2
F208.03	PD6 - F/F 6 ways	7/8"	7/8"	4.000	2
F486.02	PD6 - S/N 6 ways	7/16	N	2.000	2
F208	PD6 - F/N 6 ways	7/8"	N	4.000	2
F208.02	PD6 - F/S 6 ways	7/8"	7/16	4.000	2
F486	PD6 - Y/S 6 ways	1-5/8"	7/16	10.000	2
F486.08	PD6 - Y/F 6 ways	1-5/8"	7/8"	10.000	2
8 - WAY POWER DIVIDER FM (87,5 -108 Mhz)					
F526.05	PD8 - S/S; 8 ways	7/16	7/16	2.000	2
F526.09	PD8 - F/F; 8 ways	7/8"	7/8"	4.000	2
F526.08	PD8 - F/S; 8 ways	7/8"	7/16	4.000	2
F526	PD8 - Y/S; 8 ways	1-5/8"	7/16	10.000	2
F526.12	PD8 - Y/F; 8 ways	1-5/8"	7/8"	20.000	2

## Power Dividers

### PD U2 PD U3 PD U4 PD V2 PD V3 PD V4

These power dividers are available for any RF output power with 50 Ohm Impedance (or 75 ohm on request). They can be supplied with any connector or flange, according to user requirements and for every need regarding the number of outputs.

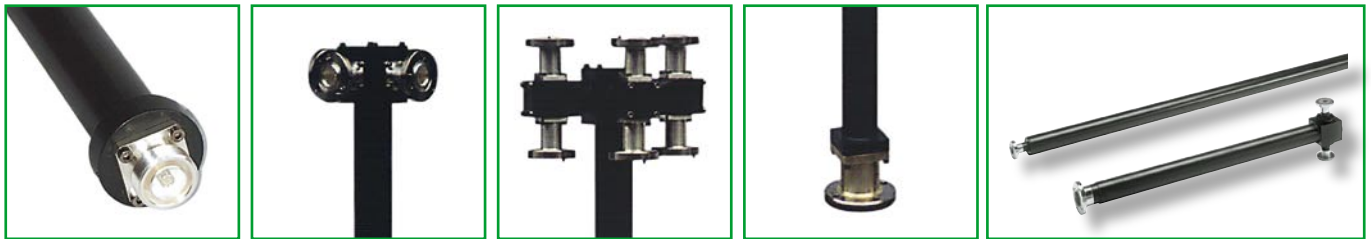
Our power dividers are broadband from 87,5 to 108 Mhz and 22 Mhz bandwidth.

The typical insertion loss is from 0,2 to 0,5 dB with

VSWR <1.08:1.

Our power dividers are made in silver-plated brass with insulator in PTFE and O-RING type washers; the body of the device is treated and covered by a special paint for lifetime duration in any climate conditions.

Power dividers for other frequency ranges are available upon request.



CODE	DESCRIPTION	INPUT CONNECTOR	OUTPUT CONNECTOR	MAX INPUT POWER (W)
2 - WAY POWER DIVIDER VHF (175-230 Mhz)				
F796.02	PDV2-S/N 2 ways	7/16	N	1.200
F796.01	PDV2-S/S 2 ways	7/16	7/16	2.000
F796	PDV2-F/S 2 ways	7/8"	7/16	3.500
F796.03	PDV2-Y/F 2 ways	1-5/8"	7/8"	7.000
F796.04	PDV2-Z/Y 2 ways	3-1/8"	7/8"	7.000
3 - WAY POWER DIVIDER VHF (175-230 Mhz)				
F797	PDV3-S/N 3 ways	7/16	N	1.800
F797.01	PDV3-S/S 3 ways	7/16	7/16	2.000
F797.02	PDV3-F/S 3 ways	7/8"	7/16	3.500
F797.03	PDV3-Y/F 3 ways	1-5/8"	7/8"	7.000
4 - WAY POWER DIVIDER FM (175-230 Mhz)				
F792.01	PDV4-S/N 4 ways	7/16	N	2.000
F792.02	PDV4-F/N 4 ways	7/8"	N	2.400
F792	PDV4-S/S 4 ways	7/16	7/16	2.000
F700	PDV4-F/S 4 ways	7/8"	7/16	3.500
F700.01	PDV4-F/F 4 ways	7/8"	7/8"	3.500
F700.02	PDV4-Y/F 4 ways	1-5/8"	7/8"	7.000
F700.03	PDV4-Z/F 4 ways	3-1/8"	7/8"	7.000
2 - WAY POWER DIVIDER UHF (470-860 Mhz)				
F798	PDU2-S/N 2 ways	7/16	N	800
F798.01	PDU2-S/S 2 ways	7/16	7/16	1.500
F798.02	PDU2-F/S 2 ways	7/8"	7/16	2.000
F798.05	PDU2-F/F 2 ways	7/8"	7/8"	2.000
F798.03	PDU2-Y/F 2 ways	1-5/8"	7/8"	4.000
F798.04	PDU2-Z/Y 2 ways	3-1/8"	1-5/8"	10.000
3 - WAY POWER DIVIDER UHF (470-860 Mhz)				
F799	PDU3-S/N 3 ways	7/16	N	1.200
F799.01	PDU3-S/S 3 ways	7/16	7/16	1.500
F799.02	PDU3-F/S 3 ways	7/8"	7/16	2.000
F799.03	PDU3-Y/F 3 ways	1-5/8"	7/8	5.000
F799.04	PDU3-Z/Y 3 ways	3-1/8"	1-5/8"	15.000
4 - WAY POWER DIVIDER UHF (470-860 Mhz)				
F791.02	PDU4-S/N 4 ways	7/16	N	1.500
F791.03	PDU4-S/S 4 ways	7/16	7/16	1.500
F791.01	PDU4-F/S 4 ways	7/8"	7/16	2.000
F791.04	PDU4-F/F 4 ways	7/8"	7/8"	2.000
F791	PDU4-Y/F 4 ways	1-5/8"	7/8"	5.000
F791.05	PDU4-Z/F 4 ways	3-1/8"	7/8	8.000
F791.06	PDU4-Z/Y 4 ways	3-1/8"	1-5/8"	15.000

## VHF Band III Dipole Panel Antennas

PTV/N

PTV/16

These VHF directional wide-band aeriels, PTV model, are designed for horizontal or vertical polarization in the transmission for TV systems. The antenna is composed of two stainless steel dipoles and a reflecting grid realized with hot dip galvanized steel.

The PTV model is suitable for the VHF band and can operate in low, medium and high power stacked-array systems, especially for square and round transmitting towers. The PTV antenna can be disassembled to reduce freighting costs.

CODE	MODEL	DESCRIPTION
F795.01	PTV/N	VHF Panel with 2 Galvanized steel dipoles, N type connector
F795	PTV/16	VHF Panel with 2 Galvanized steel dipoles, 7/16 type connector



SPECIFICATIONS	PTV
Rf output power	1000 W
Input Connector	N - 7/16 - 7/8
Polarization	Vertical ( or Horizontal )
Weight	25 Kg
Gain (Referred to Half-Wave Dipole)	7,5 dB
H Plane - V Plane	57° - 73°
Max Wind Velocity	225 Km/h
Wind Load (with speed at 150Km/h)	140 Kgs.
Wind Surface	0,65 SQM
Frequency Range	174 ÷ 225 MHz
Input Impedance	50 Ohm
VSWR	≤ 1.4:1
Internal parts	Silver-plated traded copper and brass
External parts	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.
Dimensions (W x H x D) mm	1250 x 850 x 400

## UHF Band IV-V Panel Antennas

PTU/N

PTU/16

PTU/F

These UHF directional wide-band aeriels are designed for horizontal or vertical polarization in the transmission of TV systems. The antenna is composed of eight half-wave dipoles with panel reflector and protection radome. The PTU model is suitable for the entire UHF band and can operate in low, medium or high power stacked-array systems, especially for square and round transmitting towers. As a standard, the connector is 7/16 (N female or EIA 7/8" Flange on request). The PTU antenna is supplied with a standard mounting system and can be disassembled to reduce freighting costs.

CODE	MODEL	DESCRIPTION
F790.02	PTU/N	UHF Panel with 8 dipole half wave, N type connector
F790	PTU/16	UHF Panel with 8 dipole half wave, 7/16 type connector
F790.01	PTU/F	UHF Panel with 8 dipole half wave, 7/8 type connector



SPECIFICATIONS	PTU
Rf output power	1000 - 2500 W
Input Connector	N - 7/16 - 7/8
Polarization	Horizontal
Weight	14 Kg
Gain (Referred to Half-Wave Dipole)	11 dB
H Plane - V Plane	60° - 25°
Max Wind Velocity	225 Km/h
Wind Load (with speed at 150Km/h)	89 Kgs.
Wind Surface	0,65 SQM
Frequency Range	470 ÷ 860 MHz
Input Impedance	50 Ohm
VSWR	≤ 1.13:1
Internal parts	Silver-plated traded copper and brass
External parts	Hot Galvanized steel
Mounting	From 60 to 120 mm diam.
Dimensions (W x H x D) mm	450 x 1000 x 250



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