

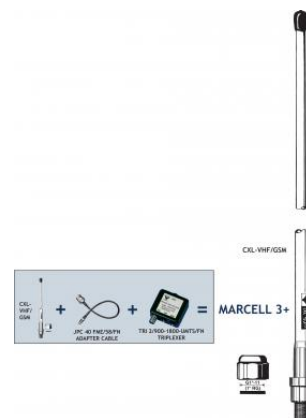
3-Band Marine Antenna System Covering FM-Radio, Maritime VHF and 900 MHz Cellular (EGSM/NMT-900)

DESCRIPTION

- Complete package for FM-Radio, maritime VHF and 900 MHz cellular
 - all you need extra is a download cable.
- The antenna is mounted using the 1" revolving nut system and easily replaces the existing antenna – the download cable may be reused.
- The system comprises:
 - CXL-VHF/GSM dual-frequency antenna,
 - TRI 2/900-1800-UMTS/FM splitting filter to connect the FM-Radio marine VHF radio and a mobile telephone to one antenna,
 - JPC 40 FME/58/FN jumper cable.
- One antenna – three bands:
 - Covers FM-Radio (87.5 – 108 MHz), maritime VHF (155 – 162 MHz) and 900 MHz cellular (890 – 960 MHz),
 - 0 dBd on maritime VHF (155 – 162 MHz) and EGSM (880 - 960 MHz), Exploits the mast head space optimally.
 - Eliminates interference problems between two closely mounted antennas.
 - Only one download cable necessary.
- Mount the antenna as high as possible and unobstructed by metal objects.
- Wide range of accessory mounting brackets available (see next page).

ORDERING

Type	Product No.
MARCELL 3+	110000129



SPECIFICATIONS

Electrical	
Model	MARCELL 3+
Frequency	FM Radio: 87.5 - 108 MHz Maritime VHF: 155 - 162 MHz EGSM: 890 - 960 MHz
Antenna Type	Triple-band marine antenna
Filter Frequency	VHF Radio: 144 - 175 MHz (COM1) Mobile telephone: 880 - 2200 MHz (COM2) Car radio: 0 - 108 MHz (RADIO)
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Pattern Type	Omnidirectional
Impedance	50 Ω
Antenna Gain	2 dBi 0 dBd on both VHF and EGSM
Antenna VSWR	TX: = 1.5:1 RX: = 2.5:1
Maximum Input Power	35 W on each filter port 10 W on 880 - 2200 MHz filter port (100 W for the antenna)
Filter Insertion Loss	0 - 108 MHz: = 1.0 dB 144 - 175 MHz: = 0.8 dB 880 MHz - 2.2 GHz: = 0.7 dB
Filter Isolation	COM1 to COM2: = 40 dB COM1 to car radio: = 35 dB COM2 to car radio: = 45 dB
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)

Mechanical	
Adaptor Cable	40 cm RG 58
Wind Area	0.013 sq. m / 0.14 sq. ft
Connection(s)	Antenna: N-female Filter: COM1, COM2, Antenna: FME Car radio: CRC-connector (M10 x 0.75) Jumper cable: FME-female and N-female
Cable	Not supplied. Min. RG 213 recommended.
Colour	Marine white
Antenna Materials	Shroud: Polyurethane coated glass fibre Mounting bracket: Chromed brass
Wind Load	15 N (160km/h)
Antenna Height	1.1 m / 43.31 in.
Dia. At Top End	8 mm / 0.31 in.
Dia. At Bottom End	16 mm / 0.63 in.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)
Filter Dimensions (W X H X D)	50 x 21 x +50 mm
Antenna Weight	0.4 kg / 0.88 lb

Environmental	
Operating Temperature Range	-30°C to +70°C

ADDITIONAL DATA

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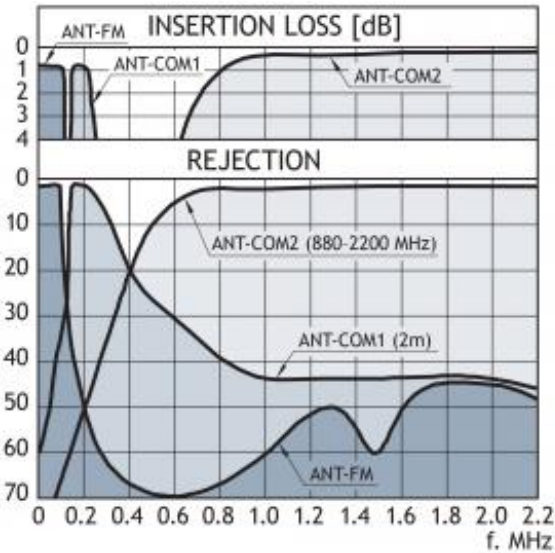
FME-SYSTEM ACCESSORIES

For further information about other types of FME-cables and FME-connectors, please compare the cable and connector data sheets under accessories in our catalogue.

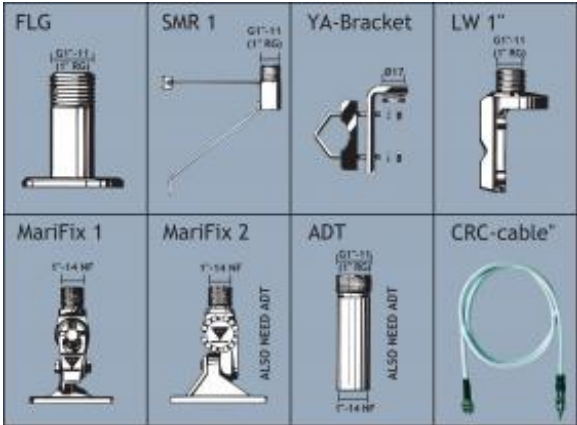
FME-CABLES	
TYPE	PRODUCT NO.
1 m FME	130000437
2 m FME	130000447
3 m FME	130000457
4 m FME	130000466
5 m FME	130000474
6 m FME	130000483
4 m FME-white	110000064
6 m FME-white	110000066
12 m FME-white	110000068
18 m FME-white	110000069

FME-CONNECTORS	
TYPE	PRODUCT NO.
FME-FME	130000583
FME-P (Prolongation)	130000565
FME-N	130000571
FME-FSMA (Female-SMA)	130000578
FME-BNC	130000566
FME-TNC	130000569
FME-UHF	130000572
FME-MUHF (Mini-UHF)	130000573
FME-EMUHF (Elbow-MUHF)	130000582
FME-EBNC (Elbow-BNC)	130000580
FME-ETNC (Elbow-TNC)	130000581
FME-SMA	130000577

FILTER RESPONSE

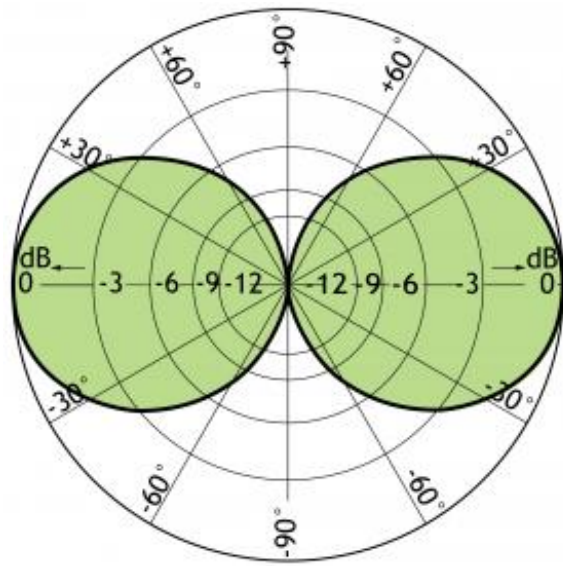


MOUNTING ACCESSORIES



(To be ordered separately)

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

