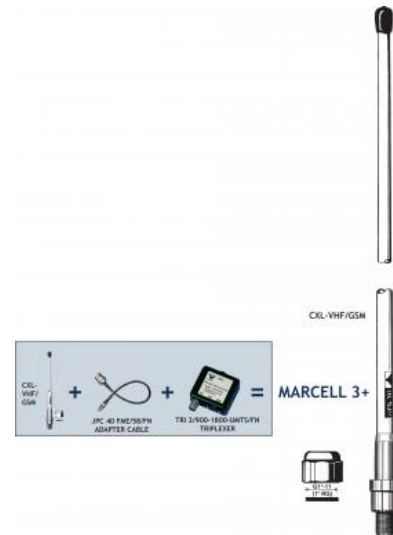


3-Band Marine Antenna System Covering FM-Radio, Maritime VHF and 900 MHz Cellular (EGSM/NMT-900)

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).



SPECIFICATIONS

Electrical	
Model	MARCELL 3+
Frequency	FM Radio : 87.5 - 108 MHz Maritime VHF Maritima : 155 - 162 MHz EGSM : 890 - 960 MHz
Antenna Type	Triple-band marine antenna
Max. Input Power	35 W on each filter port 10 W on 880 - 2200 MHz filter port (100 W for the antenna)
Filter Frequency	VHF Radio : 144 - 175 MHz (COM1) Mobile telephone : 880 - 2200 MHz (COM2) Car radio : 0 - 108 MHz (RADIO)
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, H-Plane	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
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 : 5 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
Connection(s)	Antenna : N(f) Filter : COM1, COM2, Antenna : FME Car radio : CRC-connector (M10 x 0.75) Jumper cable : FME(f) and N(f)
Cable	Not supplied. Min. RG 213 recommended.
Colour	Marine white
Antenna Materials	Shroud : Polyurethane coated glass fibre Mounting bracket : Chromed brass
Wind Area	0.013 sq. m / 0.14 sq. ft
Wind Load	15 N (160 km/h)
Antenna Height	Approx. 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 / 1.97 x 0.83 x 1.97 in.
Antenna Weight	Approx. 0.4 kg / 0.88 lb.
Environmental	
Operating temperature range	-30 °C to +70 °C

ORDERING

Model	Product No.
MARCELL 3+	110000129

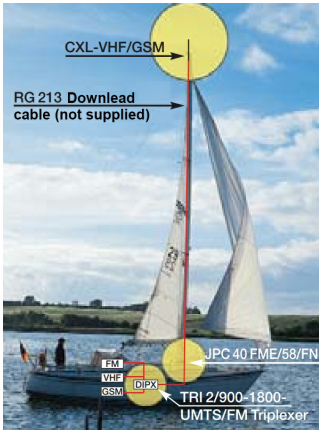
FME-SYSTEM ACCESSORIES

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.

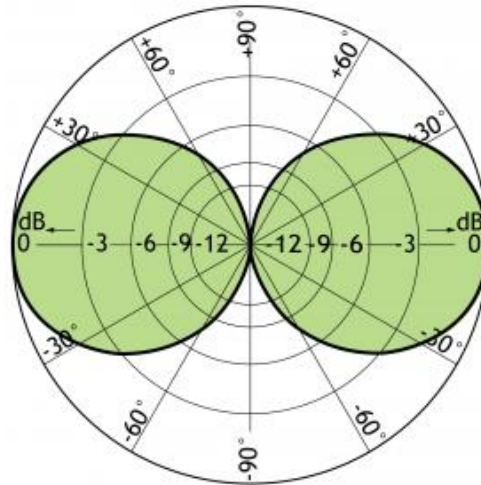
FME-CABLES	
TYPE	PRODUCT NO.
1 m FME	130000437
2 m FME	130000447
3 m FME	130000457
4 m FME	130000466
5 m FME	130000474
6 m FME	130000483
4 m FME-white	110000064
6 m FME-white	110000066
12 m FME-white	110000068
18 m FME-white	110000069

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

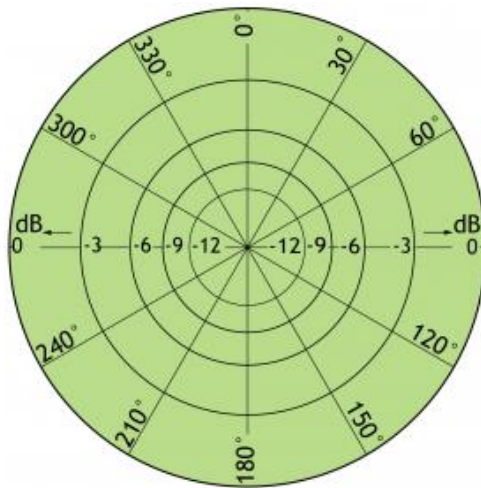
CONNECTION DIAGRAM



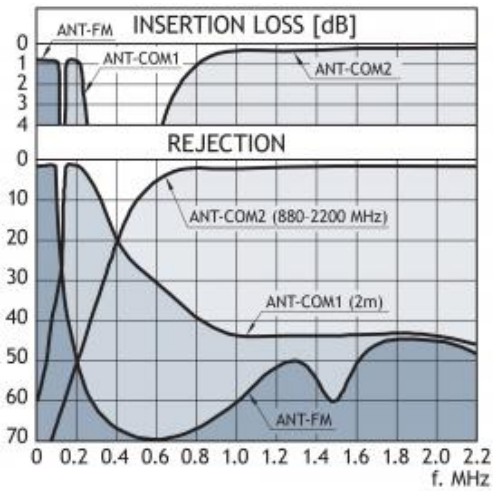
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



TYPICAL RESPONSE CURVE



ACCESSORIES (TO BE ORDERED SEPARATELY)

<p>FLG</p> <p>G1"-11 (1" RG)</p>	<p>SMR 1</p> <p>G1"-11 (1" RG)</p>	<p>YA-Bracket</p> <p>ø17</p>	<p>LW-SS-1"</p> <p>G1"-11 (1" RG)</p>
<p>MariFix 1</p> <p>1"-14 NF</p> <p>ALSO NEED ADT</p>	<p>MariFix 2</p> <p>1"-14 NF</p> <p>ALSO NEED ADT</p>	<p>ADT</p> <p>G1"-11 (1" RG)</p> <p>1"-14 NF</p>	<p>CRC-cable</p>

