

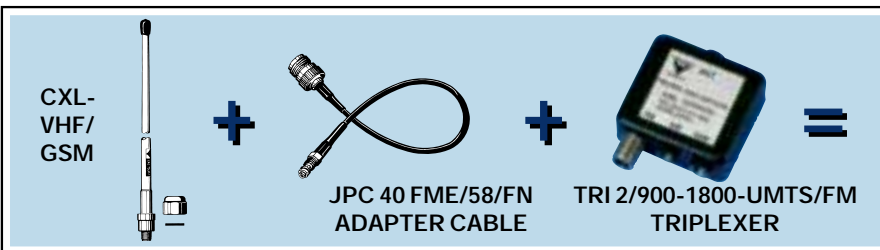
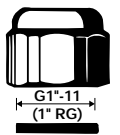
# MARCELL 3+

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



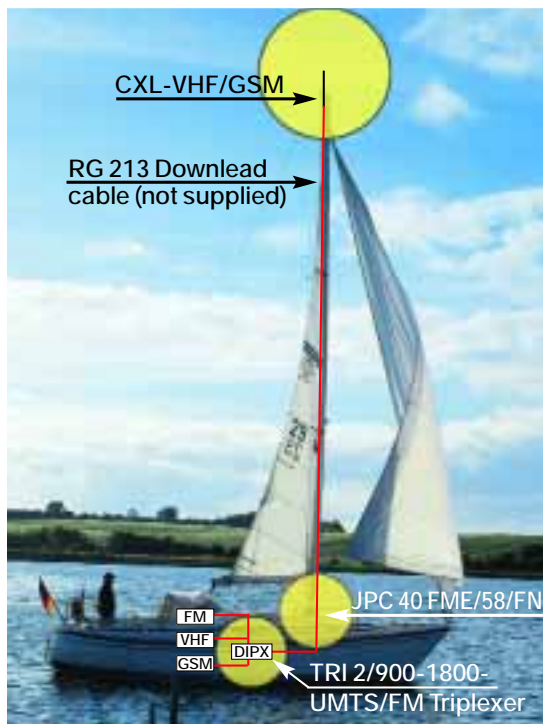
## DESCRIPTION:

- ★ Complete package for FM-Radio, maritime VHF and 900 MHz cellular – all you need extra is a downlead cable.
- ★ 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 telephones 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 downlead cable necessary.
- ★ The antenna is mounted using the 1" revolving nut system and easily replaces the existing antenna – the downlead cable may be reused.
- ★ Mount the antenna as high as possible and unobstructed by metal objects.
- ★ Wide range of accessory mounting brackets available (see next page).



**MARCELL 3+**

- Option 1 : Existing car radio cable
- Option 2 : PROCOM 1 m CRC or PROCOM 5 m CRC (110 Ω car radio cable)



PROCOM A/S reserve the right to amend specifications without prior notice.

# MARCELL 3+

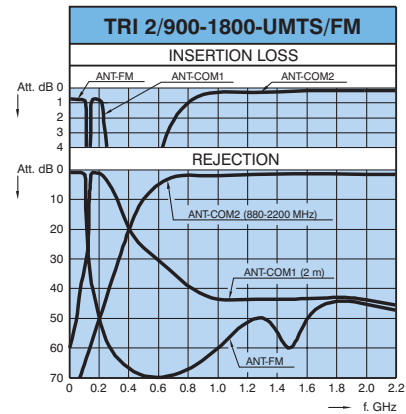
## Specifications



### SPECIFICATIONS:

| ELECTRICAL                    |  |
|-------------------------------|--|
| MODEL                         | MARCELL 3+   |
| ANTENNA TYPE                  | Triple-band marine antenna   |
| ANTENNA FREQUENCY             | FM Radio: 87.5-108 MHz<br>Maritime VHF: 155-162 MHz<br>EGSM: 890-960 MHz   |
| FILTER FREQUENCY              | VHF Radio: 144-175 MHz (COM1)<br>Mobile telephone: 880-2200 MHz (COM2)<br>Car radio: 0-108 MHz (RADIO)                                 |
| IMPEDANCE                     | Nom. 50 Ω  |
| RADIATION                     | Omnidirectional  |
| POLARISATION                  | Vertical   |
| ANTENNA GAIN                  | 0 dBd on both VHF and EGSM   |
| ANTENNA SWR                   | TX: ≤ 1.5<br>RX: ≤ 2.5   |
| FILTER INSERTION LOSS         | 0-108 MHz: ≤ 1.0 dB<br>144-175 MHz: ≤ 0.8 dB<br>880 MHz - 2.2 GHz: ≤ 0.7 dB  |
| FILTER ISOLATION              | COM1 to COM2: ≥ 40 dB<br>COM1 to car radio: ≥ 35 dB<br>COM2 to car radio: ≥ 45 dB  |
| MAX. POWER                    | 35 watt on each filter port<br>10 watt on 880-2200 MHz filter port<br>(100 watt for the antenna)                                       |
| ANTISTATIC PROTECTION         | All metal parts of the antenna are DC-grounded (shows a DC-short at the connector)   |
| MECHANICAL                    |  |
| TEMP. RANGE                   | -30° C i +70° C  |
| CONNECTORS                    | Antenna: N-female<br>Filter: COM1, COM2, Antenna:FME<br>Car radio: CRC-connector (M10 x 0.75)<br>Jumper cable: FME-female and N-female |
| ADAPTOR CABLE                 | 40 cm RG 58  |
| DOWNLEAD CABLE                | Not supplied. Min. RG 213 recommended.   |
| WIND SURFACE                  | Approx. 0.013 m <sup>2</sup>   |
| WIND LOAD                     | Approx. 15 N (at 150 km/h)   |
| ANTENNA COLOUR                | Marine white   |
| ANTENNA MATERIALS             | Radome: Polyurethane coated fiberglass<br>Mounting hardware: Bright chromed brass  |
| ANTENNA HEIGHT                | Approx. 1.1 m  |
| FILTER DIMENSIONS (W x H x D) | 50 x 21 x 50 mm  |
| ANTENNA WEIGHT                | Approx. 0.4 kg   |
| MOUNTING                      | On 1" RG (G1"-11) threaded water pipe or on optional mounting brackets (see below). Revolving nut enclosed.                            |

### FILTER RESPONSE:



### FME-SYSTEM ACCESSORIES FME-CABLES

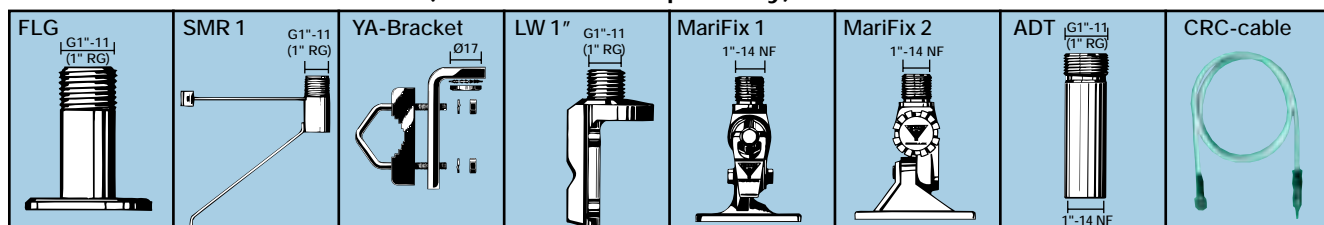
| LENGTH     | TYPE NO.  |
|------------|-----------|
| 1m         | 1m FME    |
| 2m         | 2m FME    |
| 3m         | 3m FME    |
| 4m         | 4m FME    |
| 5m         | 5m FME    |
| 6m         | 6m FME    |
| 4 m white  | FME-white |
| 6 m white  | FME-white |
| 12 m white | FME-white |
| 18 m white | FME-white |

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

### FME-SYSTEM ACCESSORIES FME-CONNECTORS

| CONNECTOR    | ORDER NO. |
|--------------|-----------|
| FME-FME      | FME-FME   |
| Prolongation | FMEP      |
| N            | FME-N     |
| FSMA         | FME-FSMA  |
| BNC          | FME-BNC   |
| TNC          | FME-TNC   |
| UHF          | FME-UHF   |
| Mini-UHF     | FME-MUHF  |
| Elbow-MUHF   | FME-EMUHF |
| Elbow-BNC    | FME-EBNC  |
| Elbow-TNC    | FME-ETNC  |
| SMA          | FME-SMA   |

### MOUNTING ACCESSORIES: (to be ordered separately)



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