

3 dBd colinear Antenna for the Base Station and Maritime VHF Band

DESCRIPTION

- This antenna is especially developed for the base station and maritime VHF band and it is used when more gain is required than obtainable with standard  $\frac{1}{2} \lambda$  dipoles.
- The 1" revolving nut mounting system is standard throughout the maritime sector, and several different mounting brackets are available, making it possible to install the antenna either on the masthead, side mounted on the mast or mounted on the cross-beam. Also, the antenna can be mounted on deck or rooftop by means of the FLG. (See accessories).
- The higher the antenna is mounted, the better coverage. Avoid mounting the antenna parallel with or in the neighbourhood of other metal parts, such as masts, supporting wires etc. The antenna needs no ground-plane, radials nor other auxiliary arrangements.
- CXL 2-3 is broad-banded, having a good SWR on the RX-frequencies as well as on the TX-frequencies. All metal parts are at ground potential and consequently, the antenna shows a DC-short across the coaxial cable.
- A conical glass fibre tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.

SPECIFICATIONS

| Electrical              |  |
|-------------------------|--|
| Model                   | CXL 2-3  |
| Frequency               | 156 - 162 MHz  |
| Antenna Type            | Omnidirectional coaxial collinear                        |
| 3 dB Beamwidth, H-Plane | Omnidirectional  |
| Polarisation            | Vertical   |
| 3 dB Beamwidth, E-Plane | 30 °   |
| Impedance               | 50 Ω   |
| Gain                    | 3 dBd (5.2 dBi)  |
| VSWR                    | < 1.5:1  |
| Maximum Input Power     | 150 W  |
| Bandwidth               | 6 MHz  |
| Antistatic Protection   | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s)             |  |

| Mechanical         |   |
|--------------------|---|
| Wind Area          | 0.063 sq. m / 0.68 sq. ft   |
| Connection(s)      | UHF female  |
| Materials          | Shroud: Polyurethane-coated glass fibre<br>Mounting bracket: Chromed brass                  |
| Colour             | White (RAL 9003)  |
| Height             | 2750 mm / 108.27 in.  |
| Wind Load          | 89 N (160km/h)  |
| Dia. At Top End    | 15 mm / 0.59 in.  |
| Weight             | 1 kg / 2.20 lb  |
| Dia. At Bottom End | 23 mm / 0.91 in.  |
| Mounting           | On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories ) |

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

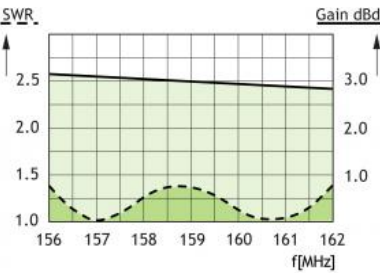
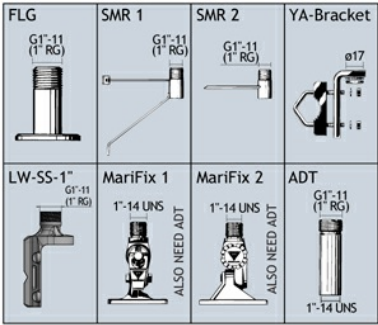
ORDERING

| Type    | Product No. |
|---------|-------------|
| CXL 2-3 | 110000130   |

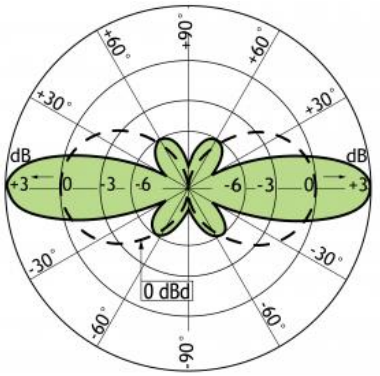


DIAGRAM

ACCESSORIES (to be ordered separately) TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

