

Lightweight, 3 dBd Base Station and Marine Antenna for the 150 MHz Band

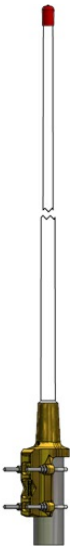
DESCRIPTION

- CXL 2-3LW/... is a 3 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the VHF-band in 5 models.
- Provided with the sturdy "LW" mast mount – a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminium.
- The accompanying U-bolts and fittings are made of stainless steel.
- To be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter.
- The cable can be led either on the outside or along the inside of the mast tube.
- Large bandwidth with respect to both VSWR and gain.
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum.
- The carefully designed, broad-banded antenna element is sealed in a high-quality conical glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- To substantially reduce noise caused by atmospherical discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- The CXL 2-3LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.

SPECIFICATIONS

| Electrical              |                                                          |
|-------------------------|----------------------------------------------------------|
| Model                   | CXL 2-3LW/...                                            |
| Frequency               | Bands within 139 - 175 MHz                               |
| Antenna Type            | Broad-banded collinear antenna                           |
| Max. Input Power        | 150 W                                                    |
| Polarisation            | Vertical                                                 |
| 3 dB Beamwidth, E-Plane | 30 °                                                     |
| 3 dB Beamwidth, H-Plane | Omnidirectional                                          |
| Impedance               | 50 Ω                                                     |
| Gain                    | 3 dBd (5.2 dBi)                                          |
| VSWR                    | < 1.5:1                                                  |
| Bandwidth               | 9 MHz                                                    |
| Antistatic Protection   | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s)             | HCM000ND00, 015DE50                                      |

| Mechanical         |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Connection(s)      | N(f)                                                                                                                               |
| Materials          | Shroud: Polyurethane-coated glass fibre<br>Mounting bracket: Seawater resistant aluminium, epoxy-coated<br>Clamps: Stainless steel |
| Colour             | White (RAL 9003)                                                                                                                   |
| Wind Area          | 0.0651 sq. m / 0.70 sq. ft                                                                                                         |
| Wind Load          | 82 N (160km/h)                                                                                                                     |
| Dia. At Top End    | 15 mm / 0.59 in.                                                                                                                   |
| Dia. At Bottom End | 23 mm / 0.91 in.                                                                                                                   |
| Height             | Approx. 2.8 m / 110.24 in.                                                                                                         |
| Weight             | Approx. 1.4 kg / 3.09 lb.                                                                                                          |
| Mounting           | On 16 to 54 mm dia. mast tube                                                                                                      |

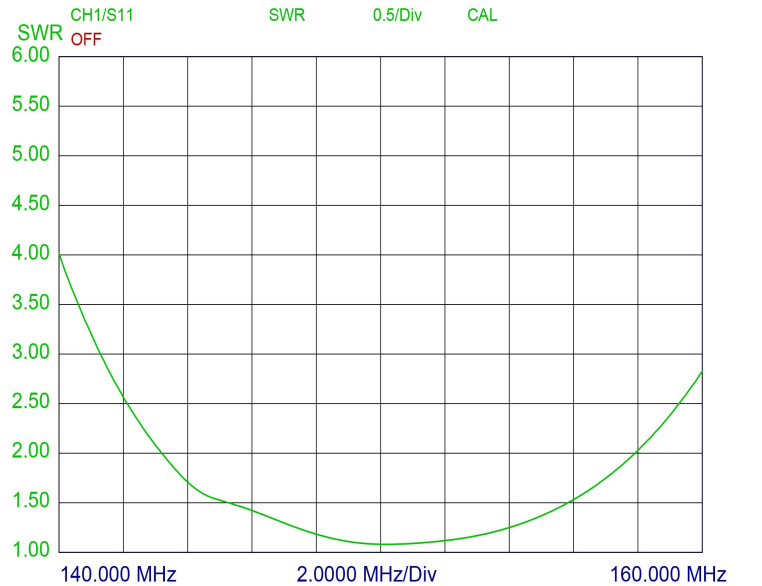


| Environmental               |                  |
|-----------------------------|------------------|
| Operating Temperature Range | -30 °C to +70 °C |
| Survival Wind Speed         | 290 km/h         |
| Ingress Protection          | IP66             |

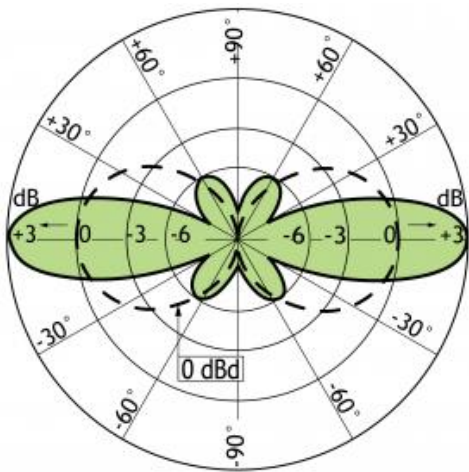
ORDERING

| Model        | Product No. | Frequency     |
|--------------|-------------|---------------|
| CXL 2-3LW/s  | 100000473   | 139 - 147 MHz |
| CXL 2-3LW/I  | 100000092   | 146 - 155 MHz |
| CXL 2-3LW/lm | 100000091   | 153 - 162 MHz |
| CXL 2-3LW/hm | 100000093   | 158 - 167 MHz |
| CXL 2-3LW/h  | 100000090   | 166 - 175 MHz |

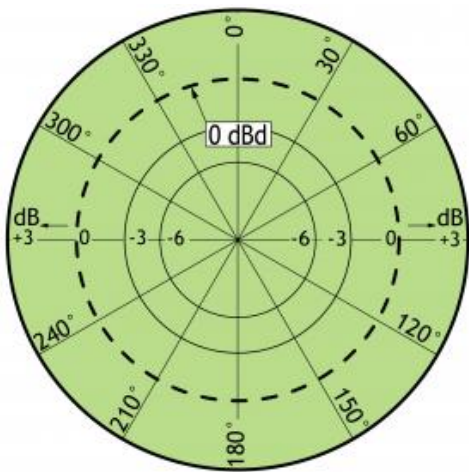
TYPICAL VSWR CURVE



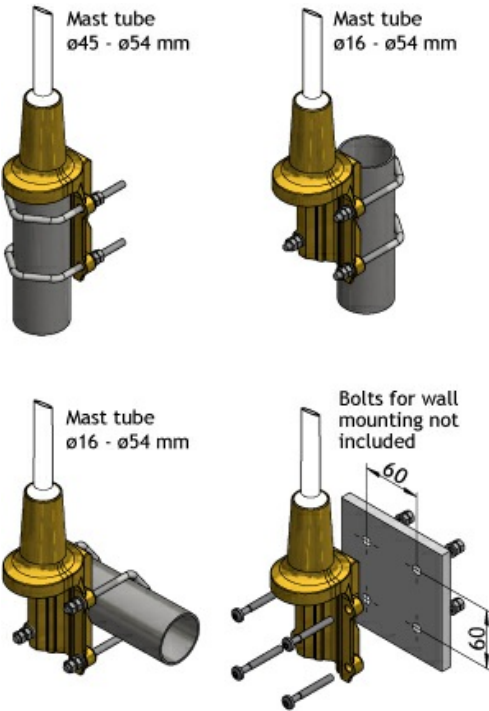
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.