



## CXL 2-3LW/...

Lightweight, 3 dBd Base Station and Marine Antenna for the 2 m Band

- 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.

### DESCRIPTION

- 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 SWR 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 atmospheric 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.

### ORDERING DESIGNATIONS

| TYPE         | PRODUCT NO. | FREQUENCY     |
|--------------|-------------|---------------|
| CXL 2-3LW/s  | 100000473   | 137 - 150 MHz |
| CXL 2-3LW/l  | 100000092   | 146 - 154 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 |

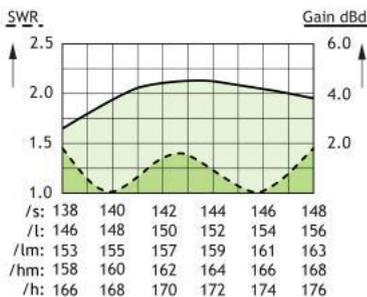
### SPECIFICATIONS

| ELECTRICAL   |                                |
|--------------|--------------------------------|
| MODEL        | CXL 2-3LW/...                  |
| ANTENNA TYPE | Broad-banded collinear antenna |
| FREQUENCY    | Bands within 137 - 175 MHz     |
| IMPEDANCE    | Nom. 50 Ω                      |
| RADIATION    | Omnidirectional                |
| POLARIZATION | Vertical                       |



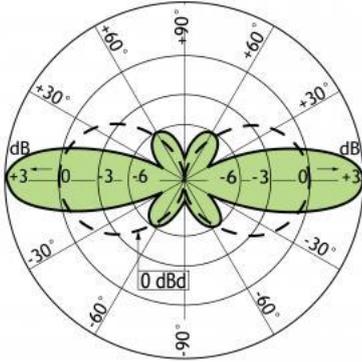
|                       |  |
|-----------------------|--|
| GAIN                  | 5 dBi 3 dBd  |
| HALF POWER BEAMWIDTH  | 30°  |
| BANDWIDTH             | 9 MHz  |
| SWR                   | ≤ 1.5  |
| MAX. POWER            | 150 W  |
| ANTISTATIC PROTECTION | All metal parts DC-grounded<br>(connector shows a DC-short)  |
| <b>MECHANICAL</b>     |  |
| TEMP. RANGE           | -30°C → +70°C  |
| CONNECTOR             | N-female   |
| WIND SURFACE          | 0.0651 m <sup>2</sup>  |
| WIND LOAD             | 82 N @ 160 km/h  |
| COLOUR                | Marine white   |
| MATERIALS             | Shroud: Polyurethane-coated glass fibre<br>Mounting bracket: Seawater resistant aluminium, epoxy-coated<br>Clamps: Stainless steel |
| TOTAL HEIGHT          | Approx. 2.8 m  |
| DIA. IN TOP END       | 15 mm  |
| DIA. IN BOTTOM END    | 23 mm  |
| WEIGHT                | Approx. 1.4 kg   |
| MOUNTING              | On 16 to 54 mm dia. mast tube  |

## TYPICAL GAIN AND SWR CURVES

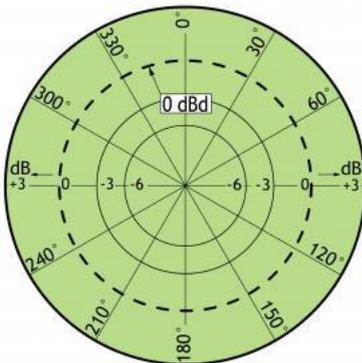


## TYPICAL RADIATION PATTERN (E-PLANE)

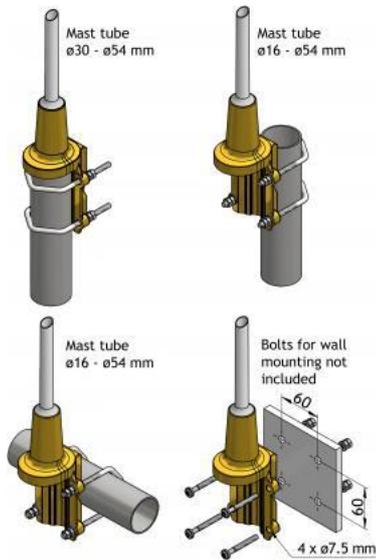




**TYPICAL RADIATION PATTERN (H-PLANE)**



**MULTI-PURPOSE MOUNTING BRACKET**



**PLEASE NOTE**

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