

## Lightweight, 5.4 dBd, Omnidirectional Base Station and Marine Antenna for the 900 MHz Band

### DESCRIPTION

- CXL 900-6LW/... is a 6 dBd, vertically polarized, omnidirectional base station and marine antenna, covering the 900 MHz band in two 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.
- Highly suitable for duplex operation with large spacing between the Tx and Rx frequencies.
- The carefully designed radiating element is sealed in a high-quality, glass fibre tube with low wind-load, ensuring undisturbed performance in all climates.
- 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 900-6LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



### SPECIFICATIONS

| Electrical              |                                                          |
|-------------------------|----------------------------------------------------------|
| Model                   | CXL 900-6LW/...                                          |
| Frequency               | Models within 824 - 960 MHz                              |
| Antenna Type            | Collinear, broad-band                                    |
| Max. Input Power        | 150 W                                                    |
| Polarisation            | Vertical                                                 |
| Pattern Type            | Omnidirectional                                          |
| 3 dB Beamwidth, E-Plane | 16 °                                                     |
| 3 dB Beamwidth, H-Plane | Omnidirectional                                          |
| Impedance               | 50 Ω                                                     |
| Gain                    | 5.4 dBd (7.6 dBi)                                        |
| VSWR                    | < 1.5:1                                                  |
| Bandwidth               | 70 - 90 MHz                                              |
| Antistatic Protection   | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s)             | HCM000ND00, 008DE22                                      |

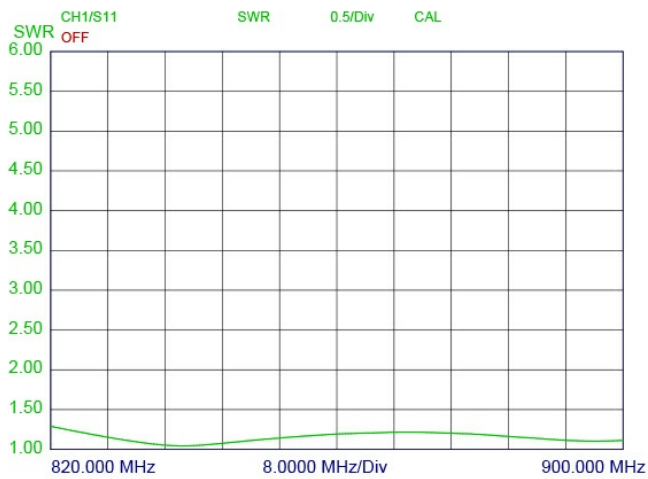
| Mechanical         |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 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          | 0.030 sq. m / 0.32 sq. ft                                                                                                          |
| Wind Load          | 43 N (160 km/h)                                                                                                                    |
| Dia. At Top End    | 23 mm / 0.91 in.                                                                                                                   |
| Dia. At Bottom End | 23 mm / 0.91 in.                                                                                                                   |
| Height             | 1260 - 1310 mm / 49.61 - 51.57 in.                                                                                                 |
| Weight             | Approx. 1.0 kg / 3.09 lb.                                                                                                          |
| Mounting           | On 16 - 54 mm / 0.63 - 2.13 in. dia. mast tube                                                                                     |

| Environmental               |                  |
|-----------------------------|------------------|
| Operating temperature range | -30 °C to +70 °C |
| Survival Wind Speed         | 200 km/h         |
| Ingress Protection          | IP66             |

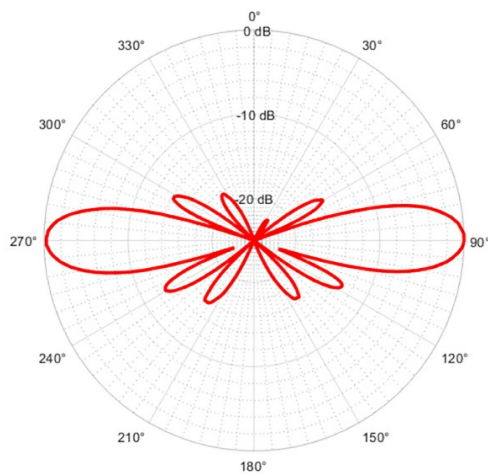
### ORDERING

| Model         | Product No. | Frequency     |
|---------------|-------------|---------------|
| CXL 900-6LW/l | 100000745   | 824 - 894 MHz |
| CXL 900-6LW/h | 100000746   | 870 - 960 MHz |

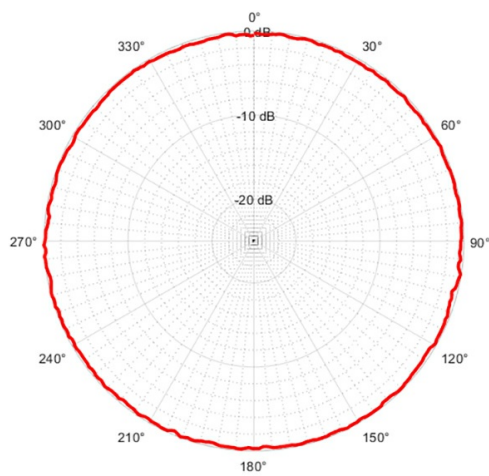
## TYPICAL VSWR CURVES



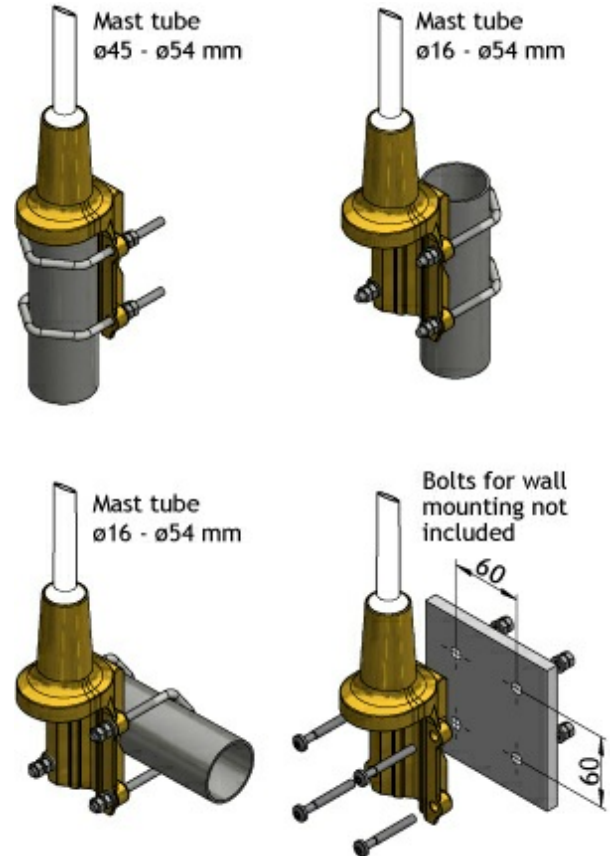
## TYPICAL RADIATION PATTERN (E-PLANE)



## 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.