

3 dBd Omnidirectional lighting protected Base Station  
Antenna for 150 MHz Band

DESCRIPTION

- CXL 2-3C-PT is a sturdy, 3 dBd, vertically polarized, omnidirectional base station antenna.
- The antenna has been approved to withstand lightning (10/350 µs impulses/150 kA) according to EN 62305-1
- The antenna is provided with our “C” mast bracket, which is a universal, epoxy-coated mounting bracket made of non-corrosive aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- The antenna can be mounted on 27 to 65 mm dia. mast tubes and it is possible to lead the cable either along the inside or on the outside of the mast tube.
- The antenna element is completely enclosed in a glass fibre shroud, 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.
- This antenna is constructed to ensure long dependable service in all climates.
- Grounding conductors is to be chosen in accordance with IEC 62305-3.



SPECIFICATIONS

| Electrical              |                                                             |
|-------------------------|-------------------------------------------------------------|
| Model                   | CXL 2-3C/...-PT                                             |
| Frequency               | 148 - 153 MHz<br>158 - 164 MHz<br>167 - 174 MHz             |
| Antenna Type            | Coaxial dipole, broad-banded                                |
| Max. Input Power        | 150 W                                                       |
| Polarisation            | Vertical                                                    |
| 3 dB Beamwidth, E-Plane | 30° - 34°                                                   |
| 3 dB Beamwidth, H-Plane | Omnidirectional                                             |
| Impedance               | 50 Ω                                                        |
| Gain                    | Approx. 3 dBd (5.2 dBi)                                     |
| VSWR                    | < 1.75:1                                                    |
| Bandwidth               | 5 - 7 MHz                                                   |
| Lightning Protection    | 150 kA (Test pulse 10/350 µs)                               |
| Antistatic Protection   | All metal parts DC-grounded<br>(Connector shows a DC-short) |
| HCM Code(s)             | HCM000ND00, 015DE40                                         |

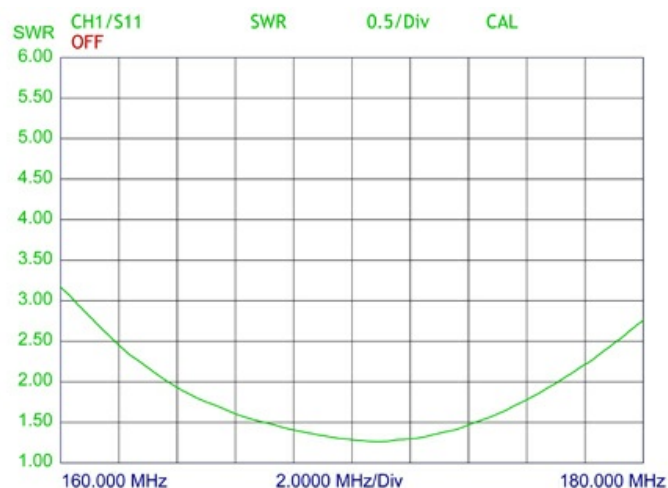
| Mechanical    |                                                                                                           |
|---------------|-----------------------------------------------------------------------------------------------------------|
| Connection(s) | N(f)                                                                                                      |
| Materials     | Radome : Polyurethane-coated glass fibre<br>Mounting bracket : Seawater resistant aluminium, epoxy-coated |
| Colour        | White (RAL 9003)                                                                                          |
| Wind Area     | 0.125 sq. m / 1.35 sq. ft                                                                                 |
| Wind Load     | 148 N (160 km/h)                                                                                          |
| Height        | Approx. 3100 mm / 122.05 in.                                                                              |
| Weight        | Approx. 5.5 kg / 12.13 lb.                                                                                |
| Mounting      | On 27 - 65 mm dia. mast tube                                                                              |

| Environmental               |                  |
|-----------------------------|------------------|
| Operating temperature range | -30 °C to +70 °C |
| Survival Wind Speed         | 200 km/h         |
| Ingress Protection          | IP56             |

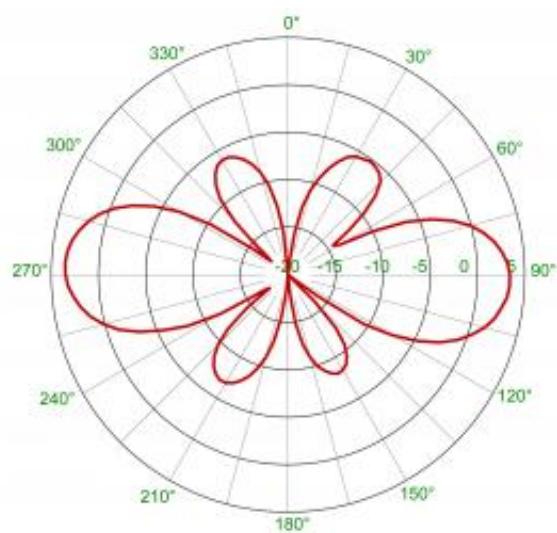
ORDERING

| Model               | Product No. |
|---------------------|-------------|
| CXL 2-3C/148-153-PT | 100000619   |
| CXL 2-3C/158-164-PT | 100000901   |
| CXL 2-3C/167-174-PT | 100000519   |

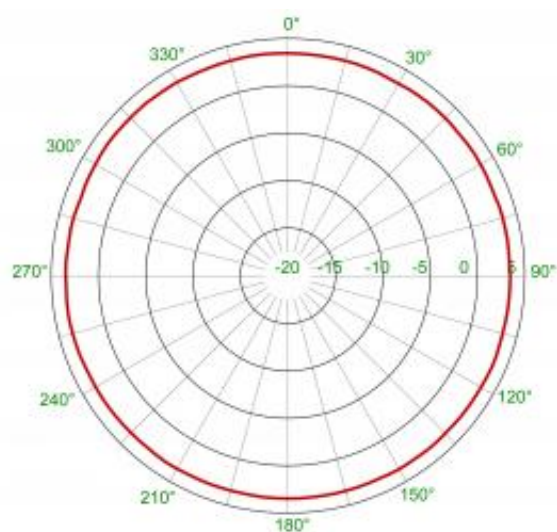
TYPICAL VSWR CURVE



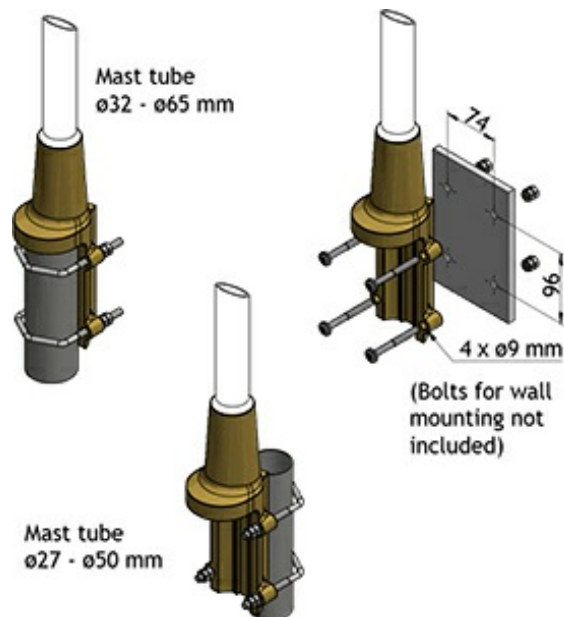
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



MOUNTING DETAILS

