

colinear, 5 dBd Base Station and Marine Antenna with  
12 degrees electrical downtilt

DESCRIPTION

- CXL 70-5C/T-12/... is a 5 dBd, vertically polarized, omnidirectional base station and marine antenna, covering the 380 – 470 MHz band.
- The antenna is provided with our type “C” universal fixation bracket made of epoxy-coated, seawater-resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- CXL 70-5C/T-12/... 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 carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, ensuring a 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 exceptional mechanical capabilities of this antenna ensure long dependable service in all environments.

SPECIFICATIONS

| Electrical              |                                                          |
|-------------------------|----------------------------------------------------------|
| Model                   | CXL 70-5C/T-12/...                                       |
| Frequency               | 380 - 470 MHz                                            |
| Antenna Type            | Collinear, broad-band                                    |
| Max. Input Power        | 250 W                                                    |
| Polarisation            | Vertical                                                 |
| Pattern Type            | Omnidirectional                                          |
| 3 dB Beamwidth, E-Plane | 18 °                                                     |
| 3 dB Beamwidth, H-Plane | Omnidirectional                                          |
| Electrical Tilt         | 12 °                                                     |
| Impedance               | 50 Ω                                                     |
| Gain                    | 5 dBd (7.2 dBi)                                          |
| VSWR                    | < 1.5:1                                                  |
| Bandwidth               | 20 MHz                                                   |
| Antistatic Protection   | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s)             | HCM000ND00, 170PM30                                      |

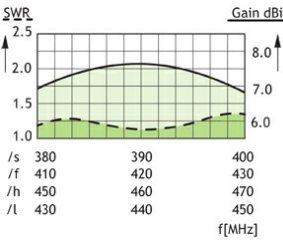
| Mechanical         |                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 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          | 0.161 sq. m / 1.73 sq. ft                                                                                                          |
| Wind Load          | 187 N (160km/h)                                                                                                                    |
| Dia. At Top End    | 40 mm / 1.57 in.                                                                                                                   |
| Dia. At Bottom End | 40 mm / 1.57 in.                                                                                                                   |
| Height             | 3200 mm / 125.98 in.                                                                                                               |
| Weight             | 4.5 kg / 9.92 lb                                                                                                                   |
| Mounting           | On 27 - 65 mm dia. mast tube                                                                                                       |

| Environmental               |                |
|-----------------------------|----------------|
| Operating Temperature Range | -35°C to +70°C |
| Survival Wind Speed         | 200 km/h       |
| Ingress Protection          | IP66           |

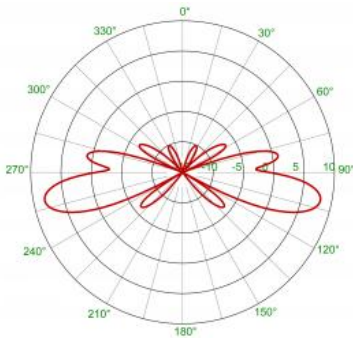


DIAGRAM

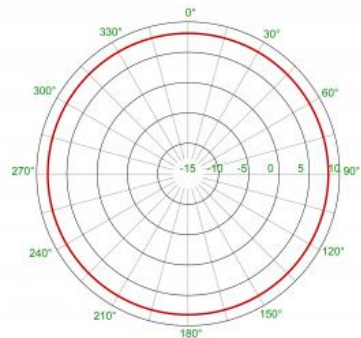
TYPICAL GAIN AND SWR CURVES



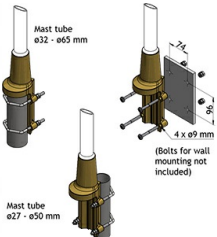
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



ORDERING

| Model            | Product No. | Frequency     |
|------------------|-------------|---------------|
| CXL 70-5C/T-12/s | 100000460   | 380 - 400 MHz |
| CXL 70-5C/T-12/f | 100000618   | 410 - 430 MHz |
| CXL 70-5C/T-12/l | 100000598   | 430 - 450 MHz |
| CXL 70-5C/T-12/h | 100000489   | 450 - 470 MHz |

