

colinear, 3 dBd Base Station and Marine Antenna for the 450 MHz Band

DESCRIPTION

- CXL 70-3C/... is a 3 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 340 – 470 MHz band in 4 models with up to 10 MHz overlap.
- The antenna is provided with our “C” universal fixation bracket made of epoxy-coated, seawater resistant aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- CXL 70-3C/... 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, 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 exceptional mechanical capabilities of this antenna ensures long dependable service in all environments.



ORDERING

| Type | Product No. | Frequency |
|--------------|-------------|---------------|
| CXL 70-3C/s | 100000113 | 380 - 410 MHz |
| CXL 70-3C/f | 100000109 | 406 - 430 MHz |
| CXL 70-3C/l | 100000112 | 420 - 450 MHz |
| CXL 70-3C/h | 100000110 | 440 - 470 MHz |
| CXL 70-3C/ls | 100000749 | 340 – 360 MHz |

SPECIFICATIONS

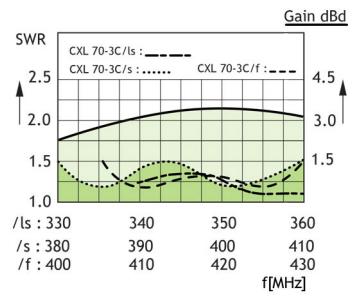
| Electrical | |
|-------------------------|------------------------------------------------------------------------|
| Model | CXL 70-3C/... |
| Frequency | 30 MHz wide frequency segments within 380 - 470 MHz. See model survey. |
| Antenna Type | Collinear, broad-band |
| 3 dB Beamwidth, H-Plane | Omnidirectional |
| Polarisation | Vertical |
| Pattern Type | Omnidirectional |
| 3 dB Beamwidth, E-Plane | 30 ° |
| Impedance | 50 Ω |
| Gain | 3 dBd (5.2 dBi) |
| SWR | < 1.5:1 |
| Maximum Input Power | 150 W |
| Bandwidth | 30 MHz |
| Antistatic Protection | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s) | HCM000ND00, 015DE50 |

| Mechanical | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Wind Area | 0.032 sq. m / 0.34 sq. ft |
| Connection(s) | N(f) |
| Materials | Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel |
| Colour | White (RAL 9003) |
| Height | 1450 mm / 57.09 in. |
| Wind Load | 40 N (160km/h) |
| Dia. At Top End | 16 mm / 0.63 in. |
| Weight | 2.4 kg / 5.29 lb |
| Dia. At Bottom End | 25 mm / 0.98 in. |
| Mounting | On 27 - 65 mm dia. mast tube |

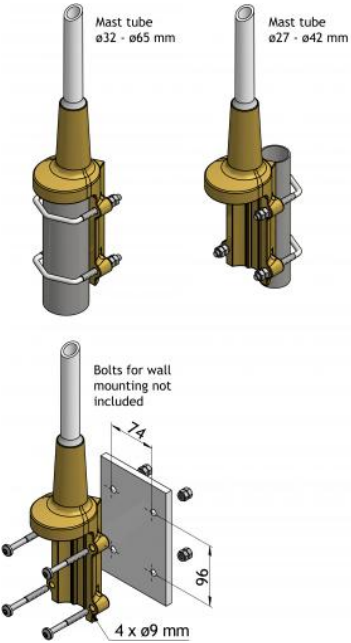
| Environmental | |
|-----------------------------|------------------|
| Operating Temperature Range | -30 °C to +70 °C |
| Survival Wind Speed | 200 km/h |
| Ingress Protection | IP66 |

DIAGRAM

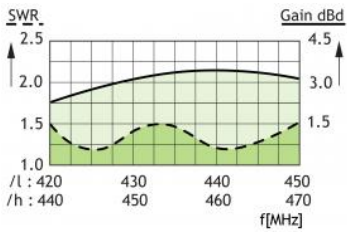
TYPICAL GAIN AND SWR CURVES



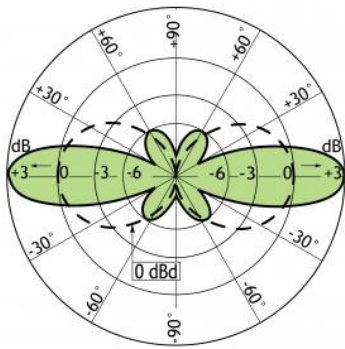
MULTI-PURPOSE MOUNTING BRACKET



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

