

Sturdy, 5 dBd, Omnidirectional Base Station Antenna for the TETRA Bands

DESCRIPTION

- CXL 70-5HD/... is an 5 dBd, vertically polarized, omnidirectional base station antenna for the TETRA bands.
- The antenna has a band width of 20 MHz.
- The antenna is provided with our sturdy type "HD" mast mount, which is a heavy-duty, multipurpose mounting bracket made of non-corrosive aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- The antenna can be mounted on mast tubes of 58 to 105 mm in outer diameter. Further, the construction of the mount makes it possible to lead the cable either along the inside or on the outside of the mast tube.
- The antenna element is sealed in a high-quality, conical glass fibre tube with low wind-load, which will ensure performance undisturbed 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.
- CXL 70-5HD/... is a vibration-proof, slim-line, corrosion-resistant, modern style base station antenna.



ORDERING

| Model | Product No. | Frequency |
|--------------|-------------|---------------|
| CXL 70-5HD/l | 100000124 | 380 - 400 MHz |
| CXL 70-5HD/h | 100000235 | 410 - 430 MHz |

SPECIFICATIONS

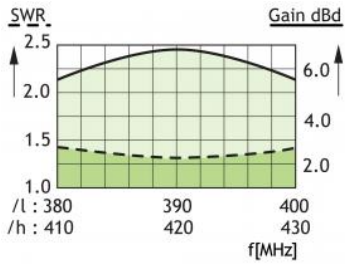
| Electrical | |
|-------------------------|--|
| Model | CXL 70-5HD/... |
| Frequency | 380 - 400 MHz and 410 - 430 MHz |
| Antenna Type | High-gain collinear |
| Max. Input Power | 250 W |
| Polarisation | Vertical |
| Pattern Type | Omnidirectional |
| 3 dB Beamwidth, E-Plane | 15 ° |
| 3 dB Beamwidth, H-Plane | Omnidirectional |
| 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, 009DE50 |

| Mechanical | |
|---------------|---|
| Connection(s) | N(f) |
| Materials | Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, polyester coated |
| Colour | White (RAL 9003) |
| Wind Area | 0.21 sq. m / 2.26 sq. ft |
| Wind Load | 274 N (160km/h) |
| Height | 3200 mm / 125.98 in. |
| Weight | 6 kg / 13.23 lb |
| Mounting | On 58 - 105 mm dia. mast tube |

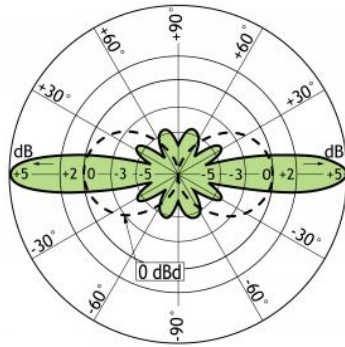
| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -30°C to +70°C |

DIAGRAM

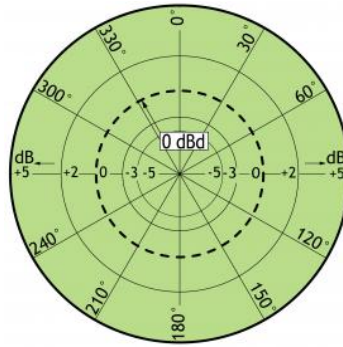
TYPICAL GAIN AND SWR CURVES



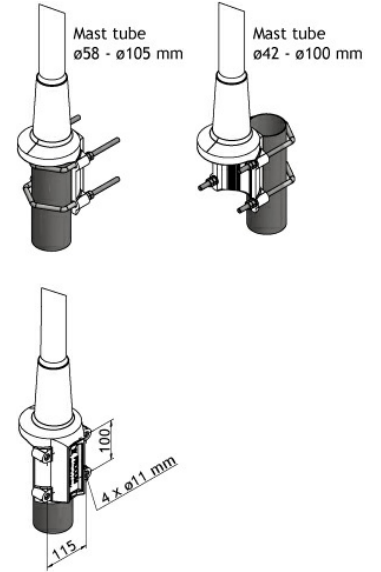
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

[Empty box for note]

When using the CXL 70-5HD/... at windy locations where wind speeds of more than 150 km/h can be expected, the antenna must be mounted on the side of the mast and the top section of the glass fibre tube stabilized with a bracket.