AMPHENOL

Dual-frequency, Base Station Antenna for the 80 MHz and TETRA BAnd

DESCRIPTION

- > CXL 4/70C/... is a dual-frequency base station antenna two bands with only one antenna.
- > This antenna makes it possible to:
- > operate 4 m and TETRA transceivers alternately on the same antenna.
- operate two transceivers (4 m and TETRA) at the same time on one antenna using a diplexer (type DIPX 225/330 must be ordered separately).
- > CXL 4/70C/... is designed for fixation on supporting tubes with outer diameter between 27 mm and 65 mm.
- The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube.
 Atmospherical discharges are immediately led to ground as all metal parts are DC-grounded (consequently, the
- antenna shows a DC-short across the coaxial cable).



ORDERING

| Model | Product No. | Frequency |
|-----------------------------|-------------|---|
| CXL 4/70C/74-87/380-400 MHz | 100000376 | 4 m band: 74 - 87 MHz TETRA: 380 - 400 MHz |

PLEASE NOTE

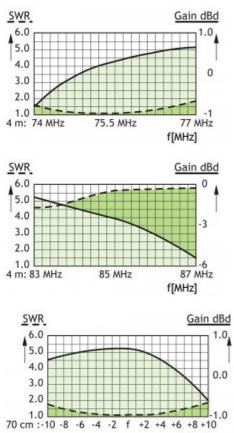
If other frequencies within the 4 m band are required, please contact us for a quotation.

SPECIFICATIONS

| Electrical | | | | |
|-------------------------|---------------------|---|---------------|--|
| Model | CXL 4/70C/ | CXL 4/70C/ | | |
| Frequency | 74 - 87 MHz | | 380 - 400 MHz | |
| Antenna Type | Coaxial, dual-ban | Coaxial, dual-band base station antenna | | |
| Max. Input Power | 100 W (for each b | 100 W (for each band) | | |
| Polarisation | Vertical | Vertical | | |
| Pattern Type | Omnidirectional | Omnidirectional | | |
| 3 dB Beamwidth, E-Plane | 80 ° | 80 ° | | |
| 3 dB Beamwidth, H-Plane | Omnidirectional | Omnidirectional | | |
| Impedance | 50 Ω | 50 Ω | | |
| Gain | 4 m : 84 - 87 MHz | 4 m : 74 - 77 MHz Approx. 2 dBi 0 dBd 4 m : 84 - 87 MHz average -6 dBi -4 dBd TETRA : Approx. 2 dBi 0 dBd | | |
| VSWR | ≤ 1.5:1 @ f. res. i | ≤ 1.5:1 @ f. res. in both bands | | |
| Bandwidth | 4 m : 84 - 87 MHz | 4 m : 74 - 77 MHz ≤ VSWR 2.0:1 4 m : 84 - 87 MHz ≤ VSWR 6.0:1 TETRA : 380 - 400 MHz ≤ VSWR 2.0:1 | | |
| Antistatic Protection | All metal parts DO | All metal parts DC-grounded (Connector shows a DC-short) | | |
| HCM Code(s) | HCM000ND00, 0 | HCM000ND00, 020DE00 | | |
| Mechanical | | | | |
| Connection(s) | | N(f) | | |
| Materials | | Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy- coated | | |
| Colour | | White (RAL 9003) | | |
| Wind Area | | 0.14 sq. m / 1.51 sq. ft | | |
| Wind Load | | 177 N (160 km/h) | | |
| Height | | Approx. 2700 mm / 106.30 in. | | |
| Weight | | Approx. 3.8 kg / 8.38 lb. | | |
| Mounting | | On 27 - 65 mm dia. mast tube | | |



TYPICAL GAIN AND VSWR CURVES

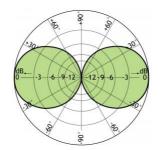


f[MHz]

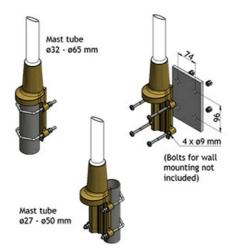
TYPICAL RADIATION PATTERN (H-PLANE)



TYPICAL RADIATION PATTERN (E-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



X

