

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

Туре	Product No.	Frequency
CXL 70-5HD/I	100000124	380 - 400 MHz
CXL 70-5HD/h	100000235	410 - 430 MHz

SPECIFICATIONS

Electrical	cal	
Model	CXL 70-5HD/	
Frequency	380 - 400 MHz and 410 - 430 MHz	
Antenna Type	High-gain collinear	
3 dB Beamwidth, H-Plane	Omnidirectional	
Polarisation	Vertical	
Pattern Type	Omnidirectional	
3 dB Beamwidth, E-Plane	15 °	
Impedance	50 Ω	
Gain	5 dBd (7.2 dBi)	
SWR	< 1.5:1	
Maximum Input Power	250 W	
Bandwidth	20 MHz	
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)	
HCM Code(s)	HCM000ND00, 009DE50	

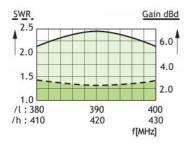
Mechanical	<i>l</i> echanical	
Wind Area	0.21 sq. m / 2.26 sq. ft	
Connection(s)	N(f)	
Materials	Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, polyester coated	
Colour	White (RAL 9003)	
Height	3200 mm / 125.98 in.	
Wind Load	274 N (160km/h)	
Weight	6 kg / 13.23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

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

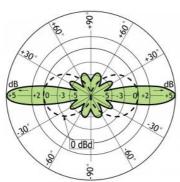


DIAGRAM

TYPICAL GAIN AND SWR CURVES



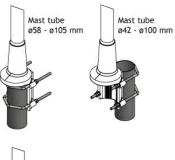
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET





PLEASE NOTE

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.