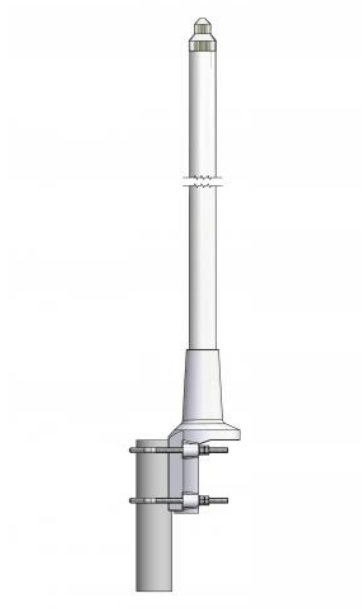
Sturdy, 3 dBd, Omnidirectional lightning protected Base Station Antenna for the TETRA Bands



DESCRIPTION

- CXL 70-3HD/…-PT is 3 dBd, vertically polarized, omnidirectional base station antenna for the TETRA bands with two models.
- The antenna has been approved to withstand lightning (10/350 µs impulses/200 kA) according to EN 62305-1.
- The antenna is provided with our sturdy type “HD” mast mount - 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. Furthermore, 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, ensuring undisturbed performance 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 70-3HD/…-PT is a vibration-proof, slim-line, corrosion-resistant, modern style base station antenna.

ORDERING

Model	Product No.	Frequency
CXL 70-3HD/l-PT	100000373	380 - 400 MHz
CXL 70-3HD/h-PT	100000380	410 - 430 MHz

SPECIFICATIONS

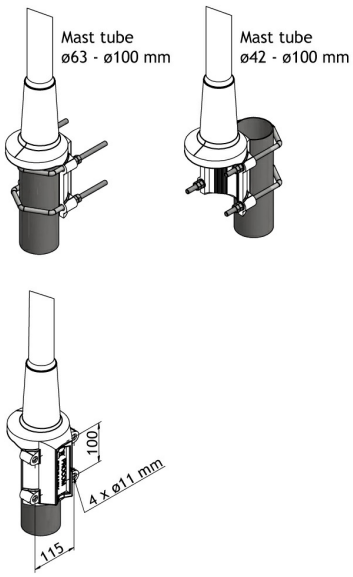
Electrical	
Model	CXL 70-3HD/...-PT
Frequency	380 - 400 MHz and 410 - 430 MHz
Antenna Type	Medium-gain collinear
Max. Input Power	250 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	25 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Lightning Protection	200 kA (Test pulse 10/350 µs)
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

Mechanical	
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated
Colour	White (RAL 9003)
Wind Area	0.11 sq. m / 1.18 sq. ft
Wind Load	139 N (160km/h)
Height	1750 mm / 68.90 in.
Weight	4.75 kg / 10.47 lb
Mounting	On 58 - 105 mm dia. mast tube

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

DIAGRAM

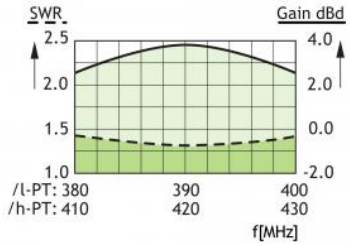
MULTI-PURPOSE MOUNTING BRACKET



MOUNTING DESCRIPTION FOR GROUND CONNECTION



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (H-PLANE)

