

CXL 70-8HD/...-PT

Sturdy, 8 dBd, Omnidirectional Base Station Antenna for the 450 MHz Band



DESCRIPTION:

- ★ CXL 70-8HD/...-PT is an 8 dBd, vertically polarised, omnidirectional base station antenna for the 450 MHz band.
- ★ The antenna has a band width of 24 MHz. Please specify centre frequency or duplex TX and RX when ordering.
- ★ The antenna has been approved to withstand lightning (10/350 μ s impulses/100 kA) according to EN 61643-11, VDE 0855-300 and VDE 0185-305-114 in FH-Kiel Laboratory in Germany.
- ★ 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.
- ★ In designing this antenna special emphasis has been laid on obtaining a large bandwidth both in relation to SWR and gain, making this antenna highly suitable for duplex operation with large spacing between the TX and RX frequencies. The phasing of the radiating elements is carefully adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum.
- ★ The antenna element is sealed in a high-quality, conical glass fibre tube with low wind-load, which will ensure undisturbed performance in all climates.
- ★ To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- ★ CXL 70-8HD/...-PT is a vibration-proof, slim-line, corrosion-resistant, modern style base station antenna.

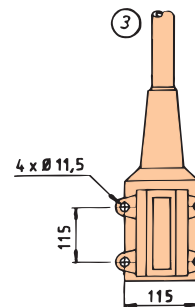
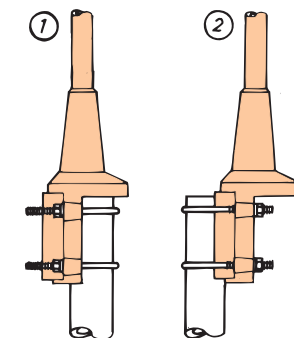
SPECIFICATIONS:

ELECTRICAL	
MODEL	CXL 70-8HD/...-PT
ANTENNA TYPE	High-gain colinear
FREQUENCY	24 MHz wide frequency segments within the 380-470 MHz range. Please specify centre frequency, or duplex TX and RX
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARISATION	Vertical
GAIN	10 dBi 8 dBd
HALF POWER BEAM WIDTH	12°
BAND WIDTH	24 MHz
SWR	≤ 1.5
MAX. POWER	250 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-30° C \rightarrow +70° C
CONNECTOR	N-female
WIND SURFACE	0.29 m ²
WIND LOAD	368 N @ 160 km/h
WIND VELOCITY	Tested to 200 km/h
COLOUR	Marine white
MATERIALS	Radome: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, polyester coated
TOTAL HEIGHT	Approx. 5.3 m (Dep. on frequency)
WEIGHT	Approx. 9 kg
MOUNTING	On 58-105 mm dia. mast tube

PLEASE NOTE:

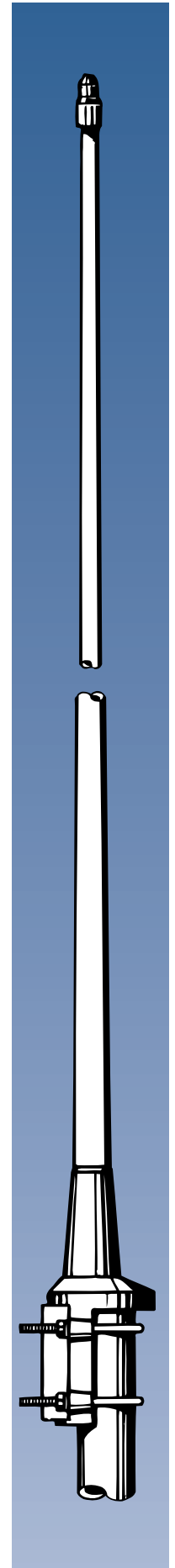
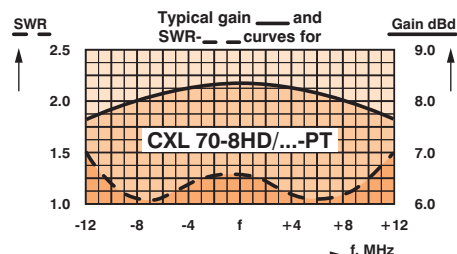
When using the CXL 70-8HD/...-PT at windy locations where wind speeds of more than 150 km/h can be expected, the antenna must be mounted on the side of the mast and the top section of the glassfibre tube stabilized with a bracket.

MULTI-PURPOSE MOUNTING BRACKET:



① Mast tube D_i , min. = 54 mm
Mast tube D_o , max. = 105 mm

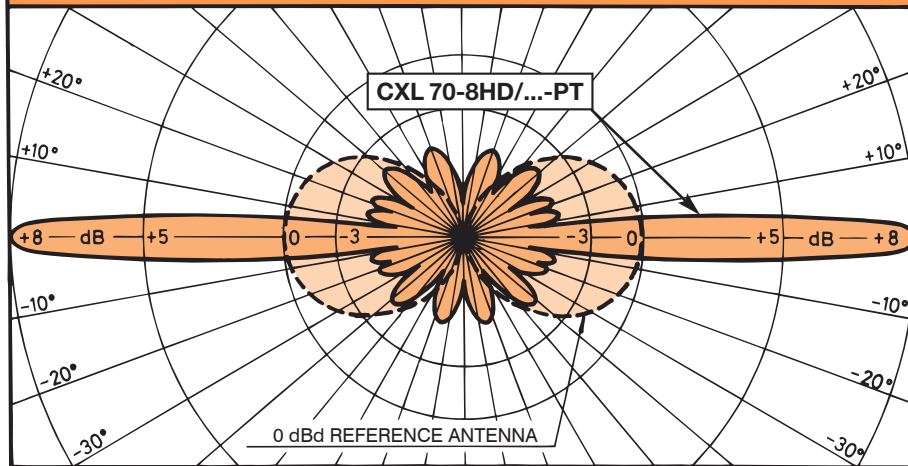
② Mast tube D_o , min. = 48 mm
Mast tube D_o , max. = 82 mm



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TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

