



CXL 70-8HD/...

STURDY, 8 DBD, OMNIDIRECTIONAL BASE STATION ANTENNA FOR THE 450 MHz BAND

CXL 70-8HD/...

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

- > CXL 70-8HD/... is an 8 dBd, vertically polarized, omnidirectional base station antenna for the 450 MHz band.
- > 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.

DESCRIPTION

- > 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 performance undisturbed 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/... is a vibration-proof, slim-line, corrosion-resistant, modern style base station antenna.
- > The CXL 70-8HD/... can be ordered on other frequencies on request.

ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
CXL 70-8HD/s	360 - 380 MHz	100000537
CXL 70-8HD/f	380 - 400 MHz	100000516
CXL 70-8HD/l	400 - 420 MHz	100000538
CXL 70-8HD/lm	421 - 440 MHz	100000539
CXL 70-8HD/m	430 - 450 MHz	100000535
CXL 70-8HD/hm	439 - 457 MHz	100000540
CXL 70-8HD/h	451 - 470 MHz	100000507
CXL 70-8HD/hh	460 - 484 MHz	100000541



SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 70-8HD/...
ANTENNA TYPE	High-gain collinear
FREQUENCY	Models within the 360 - 484 MHz range.
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	10 dBi 8 dBd
HALF POWER BEAMWIDTH	12°
BANDWIDTH	18 - 24 MHz dep. of models
SWR	≤ 1.5
MAX. POWER	250 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)

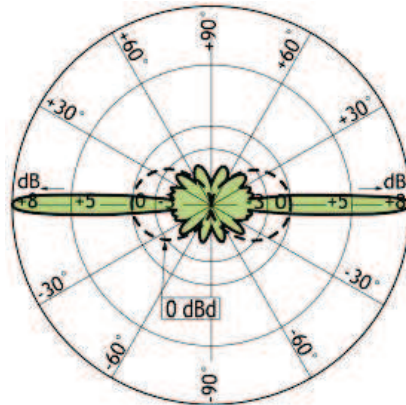


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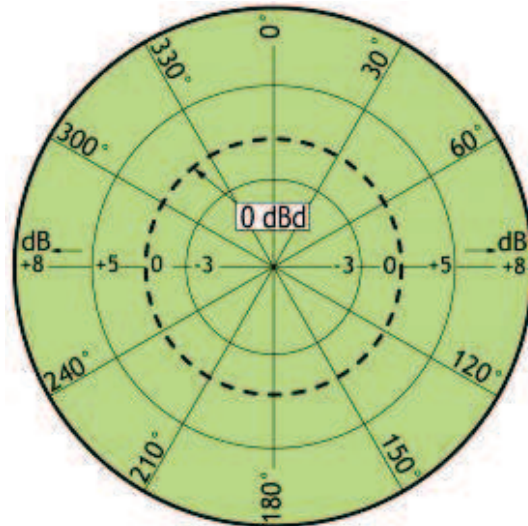
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MECHANICAL	
TEMP. RANGE	-30°C ÷ 70°C
CONNECTOR	N-female
WIND SURFACE	0.29 m ² / 3.12 feet ²
WIND LOAD	368 N @ 160 km/h / 86.39 mph.
COLOUR	Marine white
MATERIALS	Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, polyester coated
TOTAL HEIGHT	Approx. 5.3 m / 208.66 in. (Dep. on frequency)
WEIGHT	Approx. 9 kg / 19.84 lb.
MOUNTING	On 58 - 105 mm / 2.28 - 4.13 in. dia. mast tube

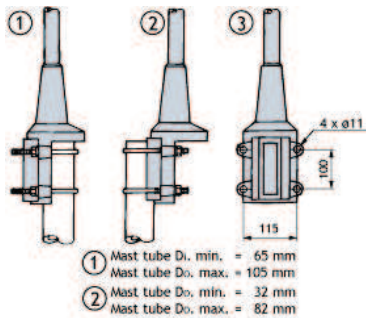
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

When using the CXL 70-8HD/... 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.

TYPICAL GAIN AND SWR CURVES

