

# CXL 70-5HD/...

## Sturdy, 5 dBd, Omnidirectional Base Station Antenna for the TETRA Bands



### DESCRIPTION:

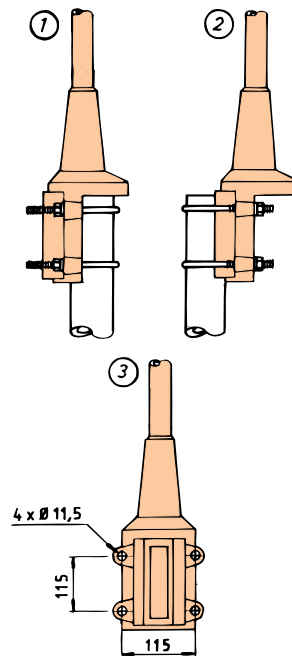
- ★ CXL 70-5HD/... is an 5 dBd, vertically polarised, omnidirectional base station antenna for the TETRA bands.
- ★ The antenna has a band width of 20 MHz.
- ★ The antenna is made on the basis of CXL 70-8HD, which has been approved to withstand lightning (10/350 µs impulses/100 kA) according to EN 61643-11 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.
- ★ The antenna element is sealed in a high-quality, conical glassfiber tube with low wind-load, which will ensure 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 70-5HD/... is a vibration-proof, slim-line, corrosion-resistant, modern style base station antenna.

### SPECIFICATIONS:

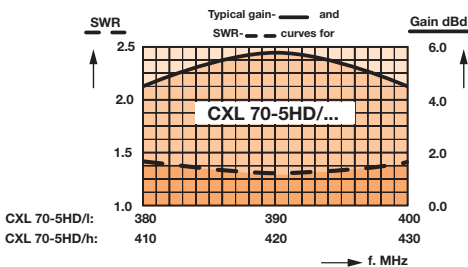
ELECTRICAL	
MODEL	CXL 70-5HD/...
ANTENNA TYPE	High-gain colinear
FREQUENCY	380-400 MHz and 410-430 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARISATION	Vertical
GAIN	7 dBi 5 dBd
HALF POWER BEAM WIDTH	15°
BAND WIDTH	20 MHz
SWR	≤ 1.5
MAX. POWER	250 watts
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-30° C → +70° C
CONNECTOR	N-female
WIND SURFACE	0.21 m <sup>2</sup>
WIND LOAD	274 N @ 160 km/h
COLOUR	Marine white
MATERIALS	Radome: Polyurethane coated fiberglass Mounting bracket: Seawater resistant aluminium, polyester coated
TOTAL HEIGHT	Approx. 3.2 m
WEIGHT	Approx. 6 kg
MOUNTING	On 58-105 mm dia. mast tube

ORDERING DESIGNATIONS	
TYPE NO.	FREQUENCY
CXL 70-5HD/l	380-400 MHz
CXL 70-5HD/h	410-430 MHz

### 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



### PLEASE NOTE:

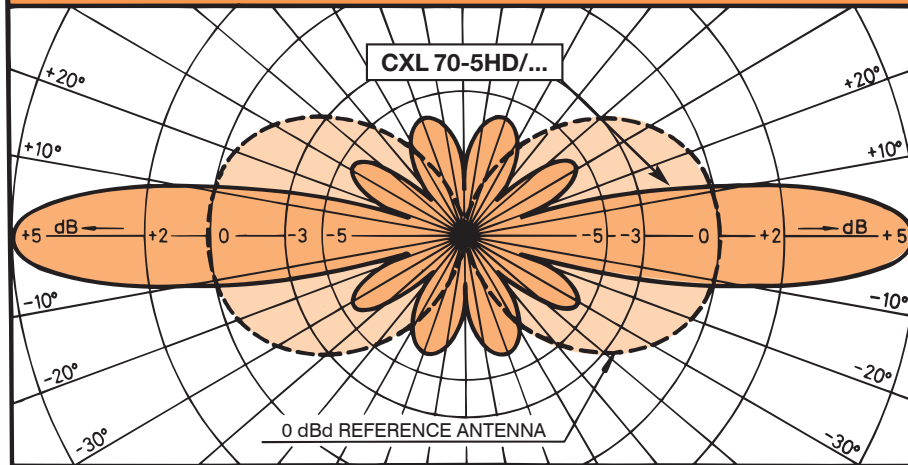
When using the CXL 70-5HD/... at windy locations where wind speeds of more than 150 km/h can be expected, the antenna must be mounted on the side of the mast and the top section of the glassfibre tube stabilized with a bracket.

PROCOM A/S reserve the right to amend specifications without prior notice.

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**TYPICAL RADIATION PATTERN (E-PLANE)**



TETRA

**TYPICAL RADIATION PATTERN (H-PLANE)**

