CXL 2-1LW/...

Universal, Unity-Gain Base Station and Marine Antenna for the 160 MHz Band

DESCRIPTION

- This multi-purpose, omnidirectional, 0 dBd, rod-type base station and marine antenna covers the 160 MHz band in two models with 10 MHz overlap and can be used in a wide variety of applications.
- The broad-banded 1/2 λ dipole antenna element is sealed in a high-quality conical glassfiber tube with low wind-load, which will ensure undisturbed performance by corrosive environments.
- Provided with the sturdy "LW" mast mount - a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminium.
- The accompanying U-bolts and fittings are made of stainless steel.
- To be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter.
- The cable can be led either on the outside or along the inside of the mast tube.
- Large bandwidth with respect to both SWR and gain.
- CXL 2-1LW/... is DC-grounded to substantially reduce noise caused by atmospherical discharges and consequently shows a DC-short across the coaxial cable.
- The CXL 2-1LW/... is a vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna.

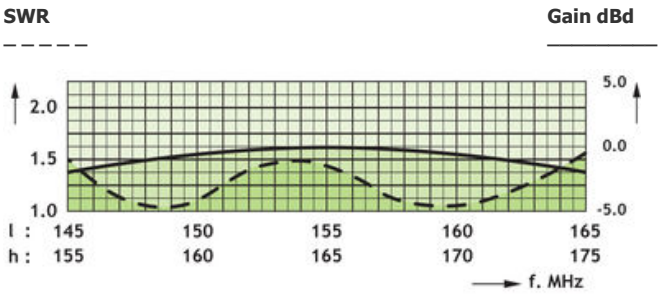
ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
CXL 2-1LW/l	144 - 165 MHz	110000082
CXL 2-1LW/h	155 - 175 MHz	110000080

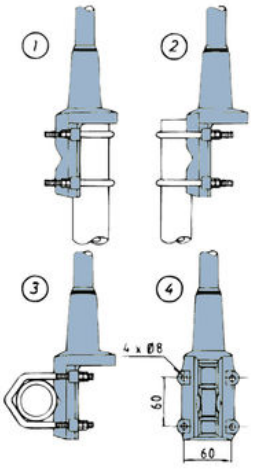
SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 2-1LW/...
ANTENNA TYPE	1/2 λ coaxial dipol, broad-banded
FREQUENCY	CXL 2-1LW/l: 144-165 MHz CXL 2-1LW/h: 155-175 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARISATION	Vertical
GAIN	2 dBi 0 dBd
BAND WIDTH	20 MHz
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
TEMP. RANGE	-30°C → +70°C
CONNECTOR	N-female
WIND SURFACE	0.0172 m²
WIND LOAD	22 N @ 160 km/h
COLOUR	Marine white
MATERIALS	Shroud: Polyurethane coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
TOTAL HEIGHT	Approx. 1.26 m (Dep. on frequency)
DIA. IN TOP END	8 mm
DIA. IN BOTTOM END	16 mm
WEIGHT	Approx. 760 g
MOUNTING	On 16 to 54 mm dia. mast tube

TYPICAL GAIN AND SWR CURVES



MULTI-PURPOSE MOUNTING BRACKET



① Mast tube D_i, min. = 30 mm
Mast tube D_O, max. = 54 mm

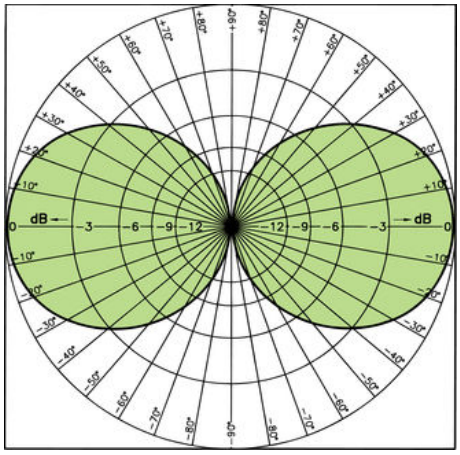
② Mast tube D_O, max. = 54 mm
Mast tube D_O, min. = 16 mm

③ Mast tube D_O, max. = 54 mm
Mast tube D_O, min. = 16 mm

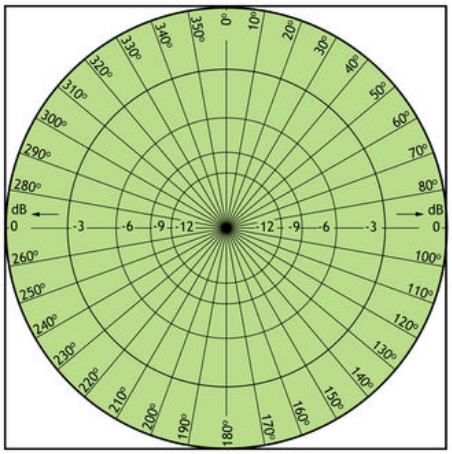
PLEASE NOTE

The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



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

17/07/2009