CXL 2-1LW/...

Universal, Unity-Gain Base Station and Marine Antenna for the $160\ \text{MHz}$ Band

DESCRIPTION

- This multi-purpose, omnidirectional, 0 dBd, rod-type base station and marine antenna covers the 160 MHz band in three models with 10 MHz overlap and can be used in a wide variety of applications.
- The broad-banded ½ λ dipole antenna element is sealed in a highquality conical glass fibre 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, corrosionresistant, modern style base station and marine antenna.



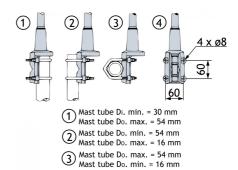
ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
CXL 2-1LW/s	110000296	138 - 156 MHz
CXL 2-1LW/I	110000082	144 - 165 MHz
CXL 2-1LW/h	110000080	155 - 175 MHz

SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 2-1LW/
ANTENNA TYPE	½ λ coaxial dipol, broad-banded
FREQUENCY	CXL 2-1LW/s: 138 - 156 MHz CXL 2-1LW/l: 144 - 165 MHz CXL 2-1LW/h: 155 - 175 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	18 - 21 MHz depending on model
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)
MECHANICAL	
MECHANICAL TEMP. RANGE	-30°C → +70°C
TEMP. RANGE	-30°C → +70°C
TEMP. RANGE CONNECTOR	-30°C → +70°C N-female
TEMP. RANGE CONNECTOR WIND SURFACE	-30°C → +70°C N-female 0.0172 m ²
TEMP. RANGE CONNECTOR WIND SURFACE WIND LOAD	-30°C → +70°C N-female 0.0172 m ² 22 N @ 160 km/h
TEMP. RANGE CONNECTOR WIND SURFACE WIND LOAD COLOUR	-30°C → +70°C N-female 0.0172 m² 22 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated
TEMP. RANGE CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS	-30°C → +70°C N-female 0.0172 m² 22 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
TEMP. RANGE CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS TOTAL HEIGHT	-30°C → +70°C N-female 0.0172 m² 22 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel Approx. 1.3 m (Dep. on frequency)
TEMP. RANGE CONNECTOR WIND SURFACE WIND LOAD COLOUR MATERIALS TOTAL HEIGHT DIA. IN TOP END	-30°C → +70°C N-female 0.0172 m² 22 N @ 160 km/h Marine white Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel Approx. 1.3 m (Dep. on frequency) 8 mm

MULTI-PURPOSE MOUNTING BRACKET



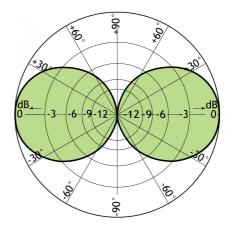
PLEASE NOTE

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

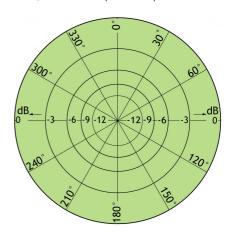


TYPICAL GAIN AND SWR CURVES

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)





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

17/06/13

