

CXL 2-1LW/...

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

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.

DESCRIPTION

- The broad-banded $\frac{1}{2} \lambda$ dipole antenna element is sealed in a high-quality 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, corrosion-resistant, modern style base station and marine antenna.

ТҮРЕ	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	

ORDERING DESIGNATIONS

SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 2-1LW/
ANTENNA TYPE	$^{1}\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$
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



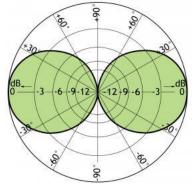
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BANDWIDTH	18 - 21 MHz depending on model	
SWR	≤ 1.5	
MAX. POWER	150 W	
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)	
MECHANICAL		
TEMP. RANGE	-30°C → +70°C	
CONNECTOR	N-female	
WIND SURFACE	0.0172 m ²	
WIND LOAD	22 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. 1.3 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	

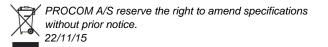
TYPICAL GAIN AND SWR CURVES

<u>swr</u>				Gain dBd
2.0				^{5.0}
1.5				0.0
1.0				-5.0
/l:145	150	155	160	165
'h: 155	160	165	170	175
/s: 135	140	145	150	156
				[MHz]

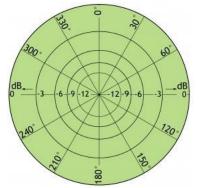
TYPICAL RADIATION PATTERN (E-PLANE)



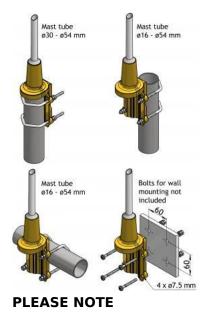
TYPICAL RADIATION PATTERN (H-PLANE)







MULTI-PURPOSE MOUNTING BRACKET



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

