

## CXL 2-1LW/...

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

- 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.
- For extreme marine environments, it is recommended to use the CXL 150-1LW-SS-R/....



#### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
CXL 2-1LW/s	110000296	138 - 156 MHz
CXL 2-1LW/l	110000082	146 - 165 MHz
CXL 2-1LW/h	110000080	155 - 175 MHz

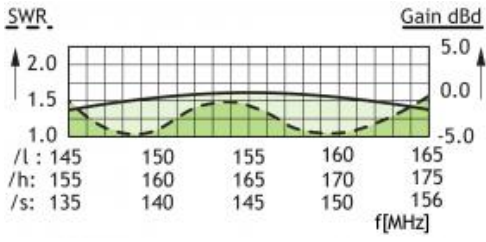
#### SPECIFICATIONS

MECHANICAL	
CONNECTOR	N-female
WIND SURFACE	0.0172 m <sup>2</sup>
WIND LOAD	22 N @ 160 km/h
MAX WIND SPEED	200 km/h
COLOUR	Marine white (RAL 9010)
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
ENVIRONMENTAL	
TEMP. RANGE	-30°C → +70°C
IP RATING	IP 66

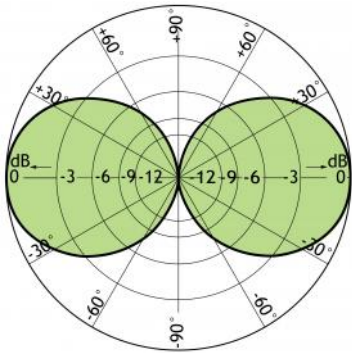
#### SPECIFICATIONS

ELECTRICAL		
MODEL	CXL 2-1LW/...	
ANTENNA TYPE	$\frac{1}{2} \lambda$ coaxial dipol, broad-banded	
FREQUENCY:		
	CXL 2-1/s:	138 - 156 MHz
	CXL 2-1/l:	146 - 165 MHz
	CXL 2-1/h:	155 - 175 MHz
IMPEDANCE	Nom. 50 $\Omega$	
RADIATION	Omnidirectional	
POLARIZATION	Vertical	
GAIN	2 dBi 0 dBd	
BANDWIDTH	18 - 21 MHz depending on model	
HALF POWER BEAMWIDTH	80°	
SWR		
	CXL 2-1/s	138 - 156 MHz $\leq$ 1.50
	CXL 2-1/l	146 - 163 MHz $\leq$ 1.50 146 - 165 MHz $\leq$ 1.75
	CXL 2-1/h	156 - 175 MHz $\leq$ 1.50 155 - 175 MHz $\leq$ 1.75
MAX. POWER	150 W	
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)	
HCM CODE	HCM000ND00, 040DE00	

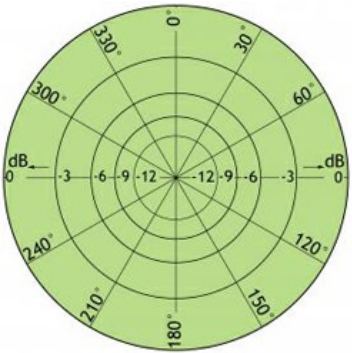
TYPICAL GAIN AND SWR CURVES



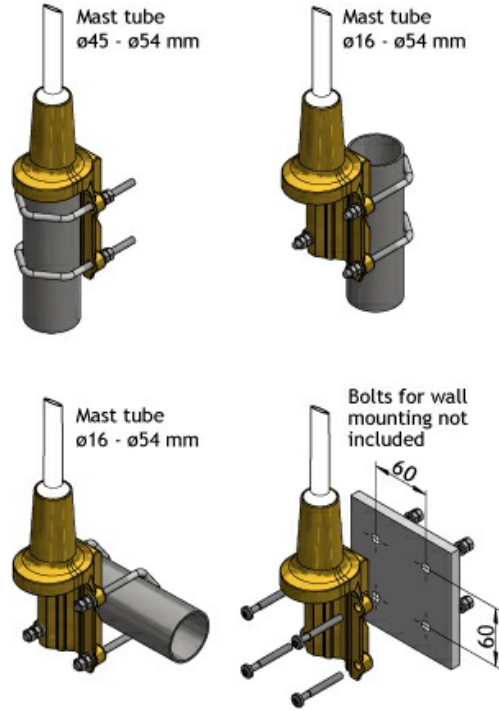
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

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