

CXL 2-3LW/...

Lightweight, 3 dBd Base Station and Marine Antenna for the 150 MHz Band

- CXL 2-3LW/... is a 3 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the VHF-band in 5 models.
- Provided with the sturdy "LW" mast mount – a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminium.

DESCRIPTION

- 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.
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum.
- The carefully designed, broad-banded antenna element is sealed in a high-quality conical glass fibre tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- 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.
- The CXL 2-3LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.

ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
CXL 2-3LW/s	137 - 150 MHz	100000473
CXL 2-3LW/l	146 - 154 MHz	100000092
CXL 2-3LW/lm	153 - 162 MHz	100000091
CXL 2-3LW/hm	158 - 167 MHz	100000093
CXL 2-3LW/h	166 - 175 MHz	100000090

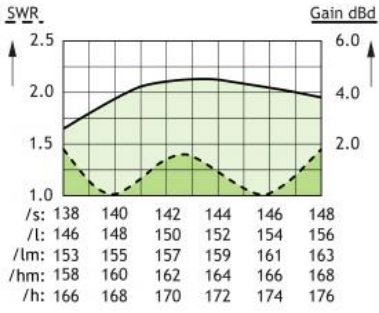


SPECIFICATIONS

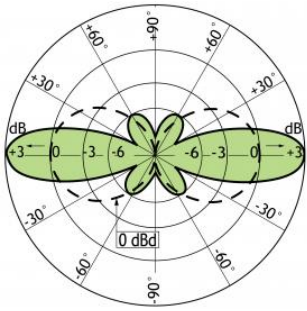
ELECTRICAL	
MODEL	CXL 2-3LW/...
ANTENNA TYPE	Broad-banded collinear antenna
FREQUENCY	Bands within 137 - 175 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	5 dBi 3 dBd
HALF POWER BEAMWIDTH	30°
BANDWIDTH	9 MHz
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (connector shows a DC-short)
HCM CODE	HCM000ND00, 015DE50

MECHANICAL	
TEMP. RANGE	-30°C → +70°C
CONNECTOR	N-female
WIND SURFACE	0.0651 m ²
WIND LOAD	82 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. 2.8 m
DIA. IN TOP END	15 mm
DIA. IN BOTTOM END	23 mm
WEIGHT	Approx. 1.4 kg
MOUNTING	On 16 to 54 mm dia. mast tube

TYPICAL GAIN AND SWR CURVES



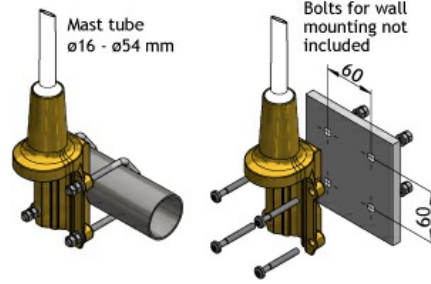
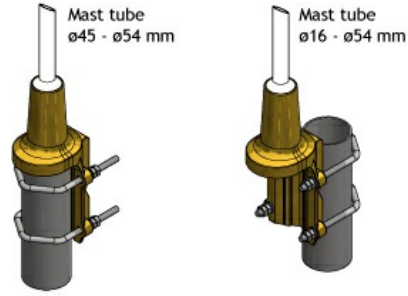
TYPICAL RADIATION PATTERN (E-PLANE)



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.