

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	139 - 147 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

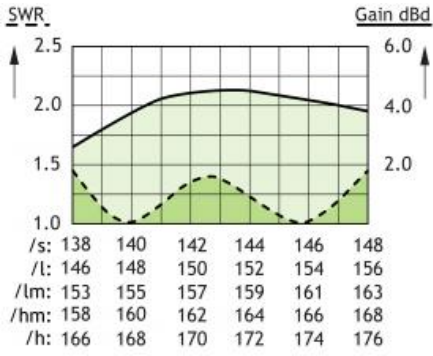


SPECIFICATIONS

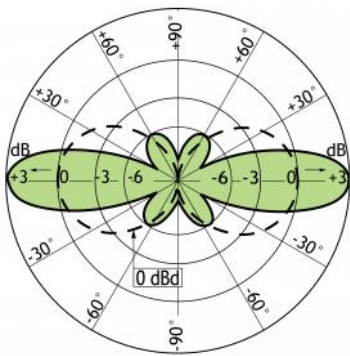
ELECTRICAL	
MODEL	CXL 2-3LW/...
ANTENNA TYPE	Broad-banded collinear antenna
FREQUENCY	Bands within 137 - 175 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	5 dBi 3 dBd
HALF POWER BEAMWIDTH	30°
BANDWIDTH	9 MHz
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts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

MECHANICAL	
CONNECTOR	N-female
WIND SURFACE	0.0651 m²
WIND LOAD	82 N @ 160 km/h
MAX WIND SURVIVAL SPEED	200 km/h
COLOUR	White (RAL 9003)
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
ENVIRONMENTAL	
TEMP. RANGE	-30°C → +70°C
IP RATING	IP 66

TYPICAL GAIN AND SWR CURVES



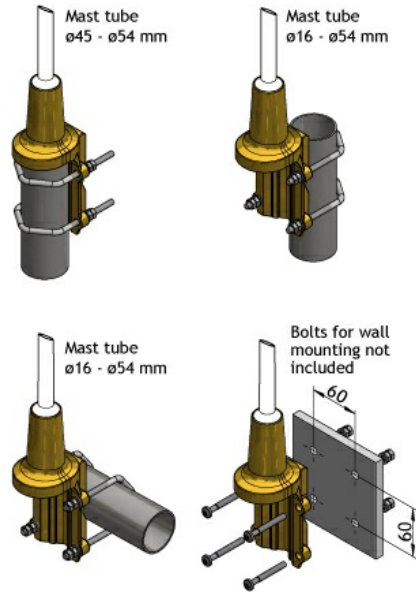
TYPICAL RADIATION PATTERN (E-PLANE)



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.