

CXL 2-3LW/164-174 MHz

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

Customized

- CXL 2-3LW/164-174 is a 3 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the VHF-band.
- 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/164-174 is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.

SPECIFICATIONS

ELECTRICAL	
MODEL	CXL 2-3LW/164-174
ANTENNA TYPE	Broad-banded collinear antenna
FREQUENCY	Bands within 164 - 174 MHz
IMPEDANCE	Nom. 50 Ω
RADIATION	Omnidirectional
POLARIZATION	Vertical
GAIN	5 dBi 3 dBd
HALF POWER BEAMWIDTH	30°
BANDWIDTH	10 MHz
SWR	≤ 1.5
MAX. POWER	150 W
ANTISTATIC PROTECTION	All metal parts DC-grounded (connector shows a DC-short)
HCM CODE	HCM000ND00, 015DE50

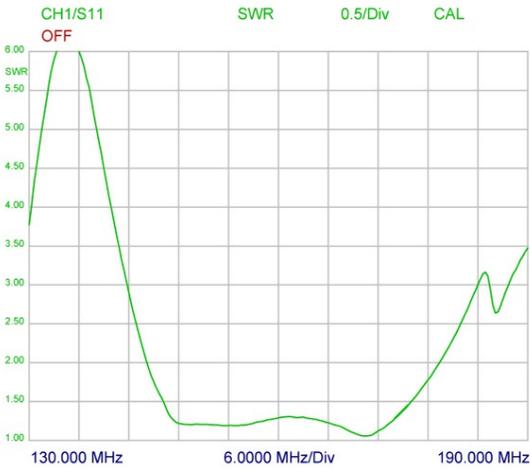


ORDERING DESIGNATIONS

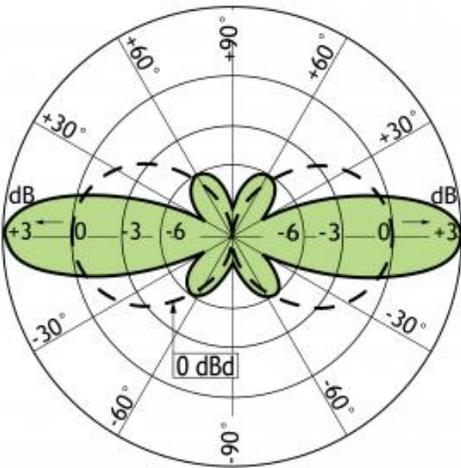
TYPE	FREQUENCY	PRODUCT NO.
CXL 2-3LW/164-174	164 - 174 MHz	100000751

MECHANICAL	
CONNECTOR	N-female
WIND SURFACE	0.0651 m ² / 7007.31 ft ²
WIND LOAD	82 N @ 160 km/h / 99.42 mph.
MAX WIND SURVIVAL SPEED	200 km/h / 124.27 mph.
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 / 110.24 in.
DIA. IN TOP END	15 mm / 0.59 in.
DIA. IN BOTTOM END	23 mm / 0.91 in.
WEIGHT	Approx. 1.4 kg / 3.09 lb.
MOUNTING	On 16 - 54 mm / 0.63 - 2.13 in. dia. mast tube
ENVIRONMENTAL	
TEMP. RANGE	-35°C → +70°C
IP RATING	IP 66

TYPICAL GAIN AND SWR CURVES



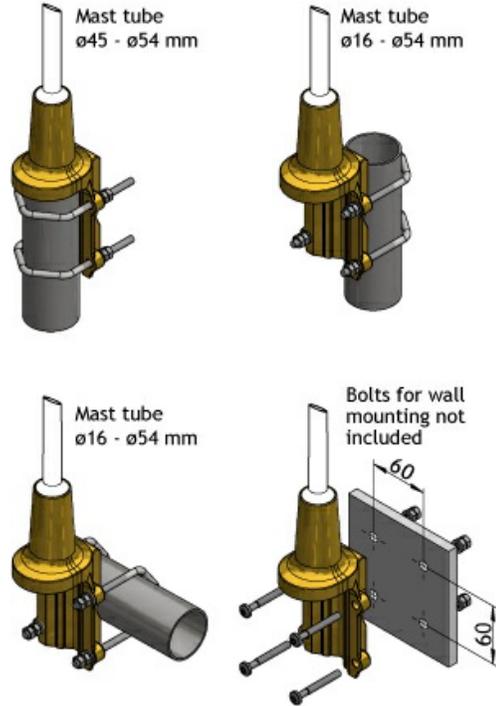
TYPICAL RADIATION PATTERN (E-PLANE)



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.