

Universal, 3 dBd Base Station and Marine Antenna for the 900 MHz Band

DESCRIPTION

- CXL 900-3LW/... is a 3 dBd, vertically polarized, omnidirectional rod-type base station and marine antenna which covers the 900 MHz band.
- 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.
- 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.
- 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 VSWR and gain.
- 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 900-3LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



SPECIFICATIONS

Electrical	
Model	CXL 900-3LW/...
Frequency	Models within 824 - 960 MHz
Antenna Type	Collinear, broad-band
Max. Input Power	100 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	30 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandwidth	70 - 80 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

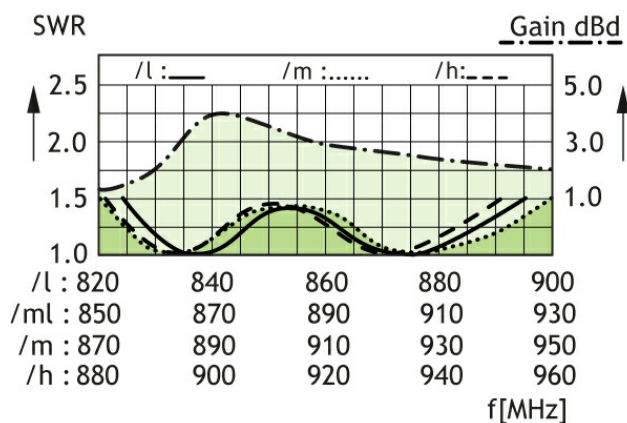
Mechanical	
Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated U-bolt and fittings : Stainless steel
Colour	White (RAL 9003)
Wind Area	0.021 sq. m / 0.23 sq. ft
Wind Load	27 N (160 km/h)
Dia. At Top End	12 mm / 0.47 in.
Dia. At Bottom End	16 mm / 0.63 in.
Height	Approx. 700 mm / 27.56 in.
Weight	Approx. 0.66 kg / 1.46 lb.
Mounting	On 16 to 54 mm dia. mast tube

Environmental	
Operating temperature range	-30 °C to +70 °C

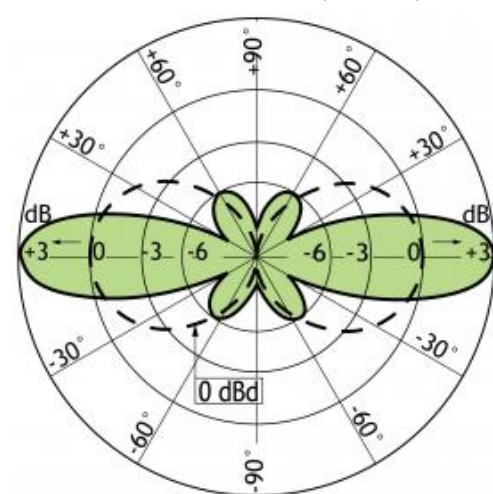
ORDERING

Model	Product No.	Frequency
CXL 900-3LW/l	110000106	824 - 894 MHz
CXL 900-3LW/lm	110000377	860 - 925 MHz
CXL 900-3LW/m	110000107	870 - 950 MHz
CXL 900-3LW/h	110000105	890 - 960 MHz

## TYPICAL GAIN AND SWR CURVES



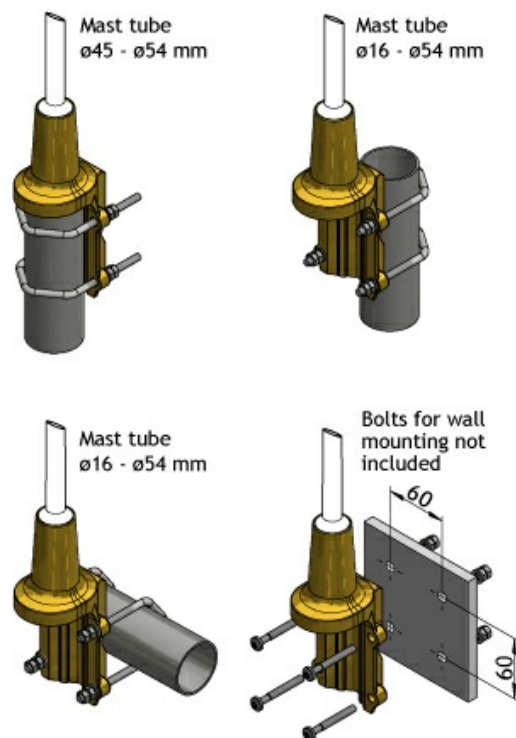
## TYPICAL RADIATION PATTERN (E-PLANE)



## 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.