

# Universal, 0 dBd Base Station and Marine Antenna for the 900 MHz Band

#### DESCRIPTION

- CXL 900-1LW/... is a 0 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 900 MHz band in three models.
- 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.
- 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 900-1LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



# **ORDERING**

Туре	Product No.	Frequency
CXL 900-1LW/I	110000103	824 - 894 MHz
CXL 900-1LW/m	110000102	870 - 950 MHz
CXL 900-1LW/h	110000098	890 - 960 MHz

# **SPECIFICATIONS**

Electrical	
Model	CXL 900-1LW/
Frequency	Models within 824 - 960 MHz
Antenna Type	Coaxial dipole, broad-banded
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80 °
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
SWR	< 1.5:1
Maximum Input Power	100 W
Bandwidth	70 - 80 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

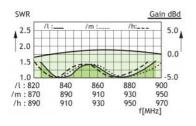
Mechanical		
Wind Area	0.018 sq. m / 0.19 sq. ft	
Connection(s)	N(f)	
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel	
Colour	White (RAL 9003)	
Height	490 mm / 19.29 in.	
Wind Load	23 N (160km/h)	
Dia. At Top End	13 mm / 0.51 in.	
Weight	0.56 kg / 1.23 lb	
Dia. At Bottom End	16 mm / 0.63 in.	
Mounting	On 16 to 54 mm dia. mast tube	

Environmental	
Operating Temperature Range	-30°C to +70°C

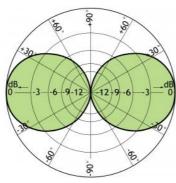


# DIAGRAM

# TYPICAL GAIN AND SWR CURVES



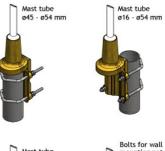
TYPICAL RADIATION PATTERN (E-PLANE)

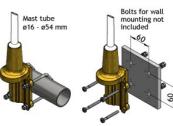


TYPICAL RADIATION PATTERN (H-PLANE)



# MULTI-PURPOSE MOUNTING BRACKET





# PLEASE NOTE

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