

# Universal, 4 dBd Omnidirectional Base Station and Marine Antenna for the 900 MHz Band

#### DESCRIPTION

- CXL 900-3LW-NB/868 MHz is a narrow-band 4 dBd, vertically polarized, omnidirectional base station and marine antenna.
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane, with the level of the side lobes 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.
- 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-NB/868 MHz is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



#### **ORDERING**

Туре	Product No.
CXL 900-3LW-NB/868 MHz	110000338

#### **SPECIFICATIONS**

Electrical	
Model	CXL 900-3LW-NB/868 MHz
Frequency	860 - 880 MHz
Antenna Type	Collinear, narrow-band
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	23 °
Impedance	50 Ω
Gain	4 dBd (6.2 dBi)
Maximum Input Power	100 W
Bandwidth	20 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

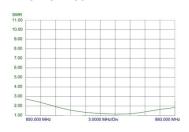
Mechanical	
Wind Area	0.035 sq. m / 0.38 sq. ft
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
Colour	White (RAL 9003)
Height	1200 mm / 47.24 in.
Wind Load	46 N (160km/h)
Dia. At Top End	23 mm / 0.91 in.
Weight	0.9 kg / 1.98 lb
Dia. At Bottom End	23 mm / 0.91 in.
Mounting	On 16 to 54 mm dia. mast tube

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

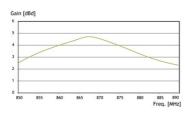


#### DIAGRAM

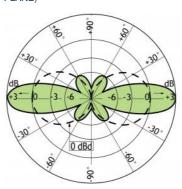
### TYPICAL SWR CURVE



#### TYPICAL GAIN CURVE



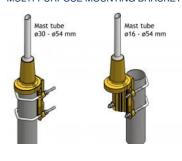
# TYPICAL RADIATION PATTERN (E-PLANE)



# TYPICAL RADIATION (H-PLANE)



#### MULTI-PURPOSE MOUNTING BRACKET



# PLEASE NOTE

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