CXL 900-6LW/...

Lightweight, 6 dBd, Omnidirectional Base Station and Marine Antenna for the 900 MHz Band

DESCRIPTION

- CXL 900-6LW/... is a 6 dBd, vertically polarized, omnidirectional base station and marine antenna, covering 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.
- Highly suitable for duplex operation with large spacing between the TX and RX frequencies.
- The carefully designed radiating element is sealed in a high-quality, conical glass fibre tube with low wind-load, ensuring undisturbed performance in all climates.
- 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 900-6LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



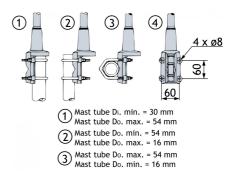
ORDERING DESIGNATIONS

TYPE	FREQUENCY	PRODUCT NO.
CXL 900-6LW/I	824 – 894 MHz	100000139
CXL 900-6LW/m	870 – 950 MHz	100000138
CXL 900-6LW/h	890 – 960 MHz	100000137

SPECIFICATIONS

ELECTRICAL		
MODEL	CXL 900-6LW/	
ANTENNA TYPE	Collinear, broad-band	
FREQUENCY	Models within 824 – 960 MHz	
IMPEDANCE	Nom. 50 Ω	
RADIATION	Omnidirectional	
POLARIZATION	Vertical	
GAIN	8 dBi 6 dBd	
HALF POWER BEAMWIDTH	14°	
BANDWIDTH	70 – 80 MHz	
SWR	≤ 1.5	
MAX. POWER	150 W	
ANTISTATIC PROTECTION	All metal parts DC-grounded (Connector shows a DC-short)	
MECHANICAL		
TEMP. RANGE	-30°C → +70°C	
CONNECTOR	N-female	
WIND SURFACE	Approx. 0.028 m ²	
WIND LOAD	Approx. 35 N @ 160 km/h	
COLOUR	Marine white	
MATERIALS	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel	
TOTAL HEIGHT	1.5 - 2.1 m (dep. on freq.)	
DIA. IN TOP END	20 mm	
DIA. IN BOTTOM END	23 mm	
WEIGHT	Approx. 1.4 kg	
MOUNTING	On 16 to 54 mm dia. mast tube	

MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

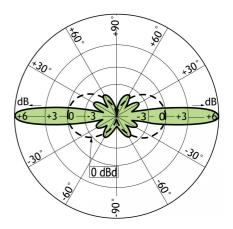
The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.



TYPICAL GAIN AND SWR CURVES

SWR Gain dBd 8.0 /m :.... **▲** 2.5 6.0 2.0 4.0 1.5 1.0 /l:820 /m:870 /h:880 860 910 880 900 840 890 930 950 900 920 940 960 f[MHz]

TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

