

Unity Gain Base Station and Marine 900 MHz Antenna for Mounting on Threaded 1

DESCRIPTION

- The CXL 900-1/... is a 0 dBd, vertically polarized, omnidirectional rod-type base station and marine antenna which covers the 900 MHz band in three models.
- The 1" revolving nut mounting system is standard throughout the base station or maritime sector, and several different mounting brackets are available, making it possible to install the antenna either on the masthead using FLG or SMR 2, side mounted on the mast (SMR 1) or mounted on a cross-beam (FLG). Also, the antenna can be mounted on deck or rooftop by means of the FLG.
- CXL 900-1/... is especially suitable for use in connection with 900 MHz CELLULAR systems – as for instance the Nordic Mobile Telephone system NMT 900 – making it possible to extend the normally land-based cellular telephone system for maritime mobile service as well.
- The higher the antenna is mounted, the better coverage. Avoid mounting the antenna parallel with or in the neighbourhood of other metal parts, such as masts, supporting wires etc., otherwise the SWR and the radiation pattern may be strongly influenced.
- To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- A conical glass fibre tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.



SPECIFICATIONS

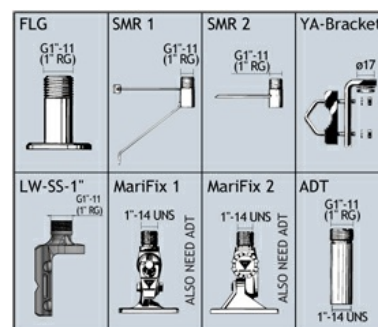
Electrical	
Model	CXL 900-1/...
Frequency	Models within 824 - 960 MHz
Antenna Type	Coaxial dipole, broad-banded
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
3 dB Beamwidth, E-Plane	80 °
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
SWR	< 1.5:1
Maximum Input Power	100 W
Bandwidth	70 - 80 MHz
HCM Code(s)	

Mechanical	
Wind Area	0.0070 sq. m / 0.08 sq. ft
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
Colour	White (RAL 9003)
Height	420 mm / 16.54 in.
Wind Load	9 N (160km/h)
Dia. At Top End	12 mm / 0.47 in.
Weight	0.35 kg / 0.77 lb
Dia. At Bottom End	16 mm / 0.63 in.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories)

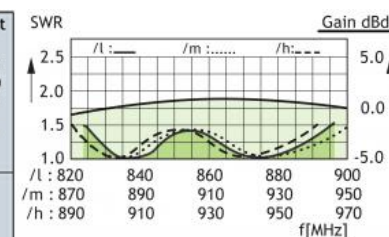
Environmental	
Operating Temperature Range	-30 °C to +70 °C
Ingress Protection	IP66

DIAGRAM

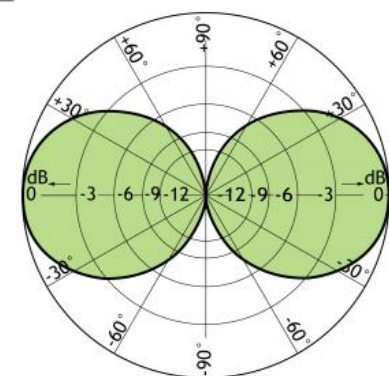
ACCESSORIES (to be ordered separately)



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

ORDERING

Type	Product No.	Frequency
CXL 900-1/l	110000146	824 - 894 MHz
CXL 900-1/m	110000145	870 - 950 MHz
CXL 900-1/h	110000144	890 - 960 MHz

