

3 dBd Gain, Base Station and Marine 900 MHz Antenna  
for Mounting on Threaded 1" Water Pipe

DESCRIPTION

- CXL 900-3/... is a 3 dBd, vertically polarized, omnidirectional rod-type base station and marine antenna which covers the 900 MHz band in four 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. (See below).
- CXL 900-3/... is especially suitable for use in connection with 900 MHz CELLULAR systems – making it possible to extend the normally land-based cellular telephone system for maritime mobile service as well.
- 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.
- The higher the antenna is mounted, the better coverage. Avoid mounting the antenna parallel to 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 atmospherical 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 900-3/...
Frequency	Models within 750 - 960 MHz
Antenna Type	Collinear, broad-band
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
3 dB Beamwidth, E-Plane	30 °
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
SWR	< 1.5:1
Maximum Input Power	100 W
Bandwidth	70 - 80 MHz
HCM Code(s)	

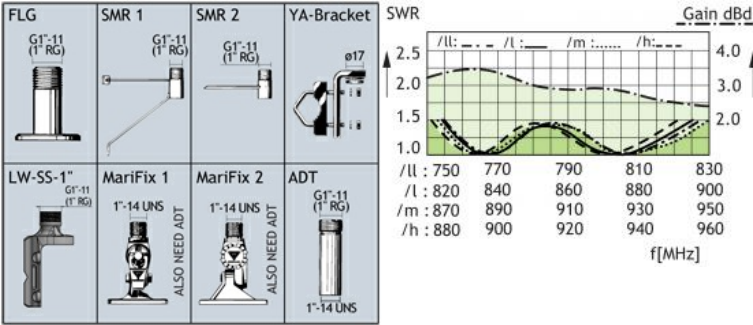
Mechanical	
Wind Area	0.0096 sq. m / 0.10 sq. ft
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
Colour	White (RAL 9003)
Height	h, m: Approx. 650 mm l : Approx. 670 mm
Wind Load	12 N (160km/h)
Dia. At Top End	12 mm / 0.47 in.
Weight	0.38 kg / 0.84 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

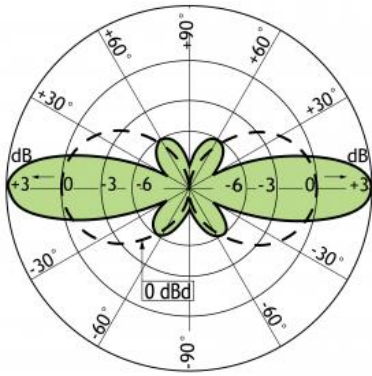


DIAGRAM

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 900-3/II	110000363	750 - 830 MHz
CXL 900-3/I	110000149	824 - 894 MHz
CXL 900-3/m	110000150	870 - 950 MHz
CXL 900-3/h	110000148	890 - 960 MHz

