# CXL 900-1/...

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

#### DESCRIPTION

- The CXL 900-1/... is a 0 dBd, vertically polarized, omnidirectional rodtype 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 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.



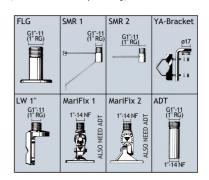
### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.	FREQUENCY
CXL 900-1/I	110000146	824 – 894 MHz
CXL 900-1/m	110000145	870 – 950 MHz
CXL 900-1/h	110000144	890 – 960 MHz

### **SPECIFICATIONS**

ELECTRICAL	
MODEL	CXL 900-1/
ANTENNA TYPE	½ λ coaxial dipole, broad-banded
FREQUENCY	Models within 824 – 960 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	2 dBi 0 dBd
BANDWIDTH	70 – 80 MHz
SWR	≤ 1.5
MAX. POWER	100 W
MECHANICAL	
TEMP. RANGE	-30°C → +70°C
CONNECTOR	N-female
WIND SURFACE	Approx. 0.0070 m <sup>2</sup>
WIND LOAD	Approx. 9 N @ 160 km/h
COLOUR	Marine white
MATERIALS	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
TOTAL HEIGHT	Approx. 420 mm
DIA. IN TOP END	12 mm
DIA. IN BOTTOM END	16 mm
WEIGHT	Approx. 350 g
MOUNTING	On 1" RG (G1"-11) threaded water pipe or on optional mounting brackets (see below)

# ACCESSORIES (to be ordered separately)

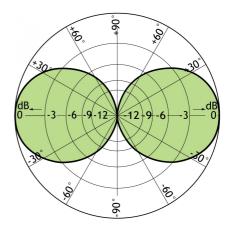




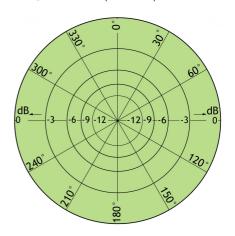
# TYPICAL GAIN AND SWR CURVES

#### SWR Gain dBd **↓** 2.5 /m :... 5.0 2.0 0.0 1.5 1.0 -5.0 /l:820 /m:870 /h:890 860 910 880 900 840 890 930 950 910 930 950 970 f[MHz]

## TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)





 $\ensuremath{\mathsf{PROCOM}}$  A/S reserve the right to amend specifications without prior notice.

29/09/11

