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 dBi, 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 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

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PRODUCT NO.</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXL 900-1/l</td>
<td>1100001146</td>
<td>824 – 894 MHz</td>
</tr>
<tr>
<td>CXL 900-1/m</td>
<td>1100001145</td>
<td>870 – 950 MHz</td>
</tr>
<tr>
<td>CXL 900-1/h</td>
<td>1100001144</td>
<td>890 – 960 MHz</td>
</tr>
</tbody>
</table>

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 m²
- 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)

- FLG
- SMR 1
- SMR 2
- YA-Bracket
- LW 1”
- ManiFix 1
- ManiFix 2
- ADT

making the world smaller
TYPICAL GAIN AND SWR CURVES

TYPICAL RADIATION PATTERN (E-PLANE)

TYPICAL RADIATION PATTERN (H-PLANE)

PROCOM A/S reserve the right to amend specifications without prior notice.

29/09/11