## CXL 1800-3LW

### 3 dBd Omnidirectional Base Station and Marine Antenna for the 1800 MHz Band

#### DESCRIPTION

- Vertically polarized, omnidirectional base station and marine antenna.
- Approximately 3 dBd gain.
- 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 the RX frequencies, e.g. the DCS-1800/PCN cellular system.
- The antenna element is sealed in a high-quality, conical glass fibre tube.
- All metal parts in the antenna are DC-grounded to reduce the noise caused by atmospherical discharge.
- Consequently, the antenna shows a DC-short across the coaxial cable.
- The CXL 1800-3LW is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.



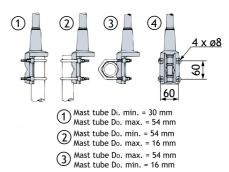
#### ORDERING DESIGNATIONS

TYPE	PRODUCT NO.
CXL 1800-3LW	100000175

#### **SPECIFICATIONS**

ELECTRICAL	
MODEL	CXL 1800-3LW
ANTENNA TYPE	Coaxial, collinear antenna, broadbanded
FREQUENCY	1710 – 1880 MHz
IMPEDANCE	Nom. 50 Ω
POLARIZATION	Vertical
GAIN	5 dBi 3 dBd
BANDWIDTH	≥ 170 MHz @ SWR ≤ 2.0
SWR	≤ 2.0, typ. ≤ 1.75
MAX. POWER	100 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. 0.02 m <sup>2</sup>
WIND LOAD	Approx. 25 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	Approx. 700 mm
DIA. IN TOP END	12 mm
DIA. IN BOTTOM END	16 mm
WEIGHT	Approx. 600 g
MOUNTING	On 16 to 54 mm dia. mast tube

## MULTI-PURPOSE MOUNTING BRACKET



## PLEASE NOTE

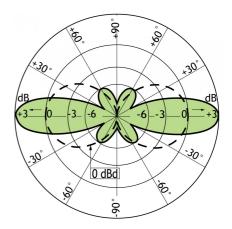
The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.



## TYPICAL GAIN AND SWR CURVES

# 2.5 2.0 1.5 1.0 1700 1740 1780 1820 1860 1900 f[MHz]

#### TYPICAL RADIATION PATTERN



TYPICAL RADIATION PATTERN (H-PLANE)

