

# 3 dBd Omnidirectional Base Station and Marine Antenna for the 2400 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, epoxycoated 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.
- $\sum$  The cable can be led either on the outside or along the inside of the mast tube.
- > Large bandwidth with respect to both VSWR and gain.
- Highly suitable for duplex operation with large spacing between the Tx and the Rx frequencies.
- 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 2400-3LW/... is a vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.

#### SPECIFICATIONS

Electrical	
Model	CXL 2400-3LW/
Frequency	Models within 2200 - 2700 MHz
Antenna Type	Collinear, broad-band
Max. Input Power	100 W
Polarisation	Vertical
3 dB Beamwidth, E-Plane	22 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	≤ 2.0, typ. ≤ 1.5
Bandwidth	For I, m and h models : ≥ 200 MHz @ VSWR ≤ 2.0:1 For II-model : ≥ 100 MHz @ VSWR ≤ 2.0:1
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE40
Mechanical	

Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated Clamps : Stainless steel
Colour	White (RAL 9003)
Wind Area	0.02 sq. m / 0.22 sq. ft
Wind Load	26 N (160 km/h)
Dia. At Top End	22 mm / 0.87 in.
Dia. At Bottom End	23 mm / 0.91 in.
Height	Approx. 620 mm / 24.41 in.
Weight	Approx. 0.6 kg / 1.32 lb.
Mounting	On 16 to 54 mm dia. mast tube



# Environmental

Operating temperature range

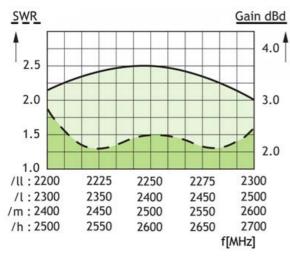
-30 °C to +70 °C

#### ORDERING

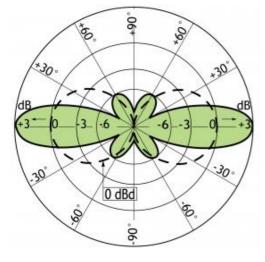
Model	Product No.	Frequency
CXL 2400-3LW/II	100000557	2200 - 2300 MHz
CXL 2400-3LW/I	100000183	2300 - 2500 MHz
CXL 2400-3LW/m	100000169	2400 - 2600 MHz
CXL 2400-3LW/h	100000171	2500 - 2700 MHz



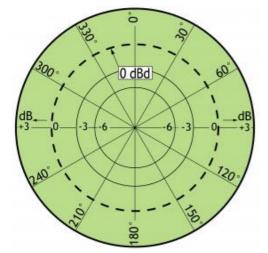
#### TYPICAL GAIN AND VSWR CURVE



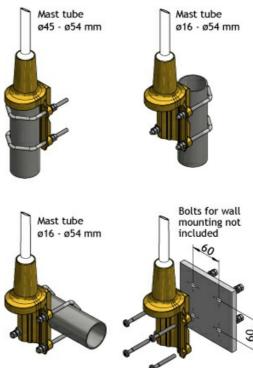
### TYPICAL RADIATION PATTERN (E-PLANE)



#### TYPICAL RADIATION PATTERN (H-PLANE)



# MULTI-PURPOSE MOUNTING BRACKET



# PLEASE NOTE

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

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