

# Unity Gain, Broad-Banded Base Station Antenna for 175 - 400 MHz

# DESCRIPTION

- > CXL 175-400C is a 0 dBd gain, omnidirectional base station antenna.
- The antenna is extremely broad-banded and covers the complete band: 175 400 MHz
- CXL 175-400C is designed for fixation on supporting tubes with outer diameter between 27 mm and 65 mm.
- The construction of the mount makes it possible to lead the cable either inside or along the outside of the mast tube.
- A glass fibre tube completely encloses the carefully designed radiating element to ensure long dependable service in all climates.
- Atmospherical discharges are immediately led to ground as all metal parts are DC-grounded (consequently, the antenna shows a DC-short across the coaxial cable).
- This antenna is used where reliability is of utmost importance. A long lifetime has been taken into consideration when designing this antenna it is sturdy and strong.



# **SPECIFICATIONS**

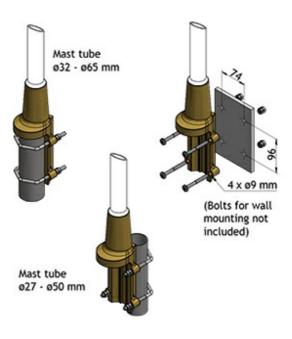
Electrical	
Model	CXL 175-400C
Frequency	Covering: 175 - 400 MHz
Antenna Type	Coaxial dipole, broad-banded
Max. Input Power	200 W
Polarisation	Vertical
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi) (see curves)
VSWR	< 2.5:1
Bandwidth	225 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)

Mechanical	
Connection(s)	N(f)
Materials	Radome: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamp set: Stainless Steel
Colour	White (RAL 9003)
Wind Area	0.056 sq. m / 0.60 sq. ft
Wind Load	71 N (160km/h)
Height	Approx. 1000 mm / 39.37 in.
Weight	Approx. 3.0 kg / 6.61 lb
Mounting	On 27 - 65 mm / 1.02 - 2.56 in. dia. mast tube

## ORDERING

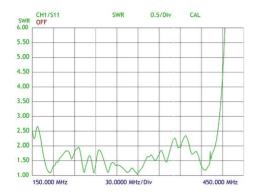
Model	Product No.
CXL 175-400C	100000086

#### MULTI-PURPOSE MOUNTING BRACKET

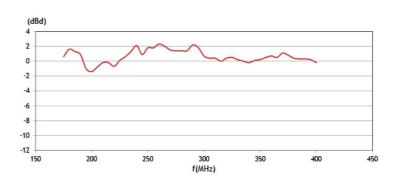




## TYPICAL VSWR CURVE

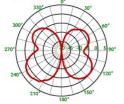


## TYPICAL GAIN CURVE

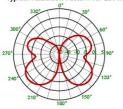


#### TYPICAL RADIATION PATTERN

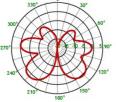
Typical Radiation Pattern for 200 MHz (E-Plane)



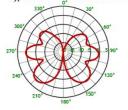
Typical Radiation Pattern for 250 MHz (E-Plane)



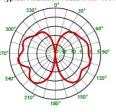
Typical Radiation Pattern for 300 MHz (E-Plane)



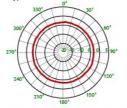
Typical Radiation Pattern for 350 MHz (E-Plane)



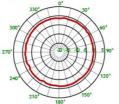
Typical Radiation Pattern for 400 MHz (E-Plane)



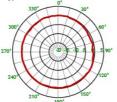
Typical Radiation Pattern for 200 MHz (H-Plane)



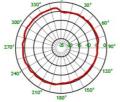
Typical Radiation Pattern for 250 MHz (H-Plane)



Typical Radiation Pattern for 300 MHz (H-Plane)



Typical Radiation Pattern for 350 MHz (H-Plane)



Typical Radiation Pattern for 400 MHz (H-Plane)

