

Sturdy, 3 dBd Gain Base Station Antenna for the 160 MHz Band

DESCRIPTION

- CXL 2-3C/... is a sturdy, 3 dBd, vertically polarized, omnidirectional base station antenna, which covers the 160 MHz band in 4 models.
- The antenna is provided with our “C” mast bracket, which is a universal, epoxy-coated mounting bracket made of non-corrosive aluminium. The accompanying U-bolts and fittings are made of stainless steel.
- The antenna can be mounted on 27 to 65 mm dia. mast tubes and it is possible to lead the cable either along the inside or on the outside of the mast tube.
- The phasing of the radiating elements is carefully adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum. Special emphasis has been laid on obtaining a large bandwidth both in relation to SWR and gain.
- The broad-banded antenna element is completely enclosed in a glass fibre shroud, which will ensure performance undisturbed by corrosive environments.
- 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.
- This antenna is constructed to ensure long dependable service in all climates.

SPECIFICATIONS

Electrical	
Model	CXL 2-3C/...
Frequency	137 - 175 MHz covered by 4 models. See model survey
Antenna Type	Collinear, broad-band
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
3 dB Beamwidth, E-Plane	30 °
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Maximum Input Power	150 W
Bandwidth	13 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	

Mechanical	
Wind Area	0.143 sq. m / 1.54 sq. ft
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated
Colour	White (RAL 9003)
Height	2950 mm / 116.14 in.
Wind Load	181 N (160km/h)
Weight	4.2 kg / 9.26 lb
Mounting	On 27 - 65 mm dia. mast tube

Environmental	
Operating Temperature Range	-35 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP56

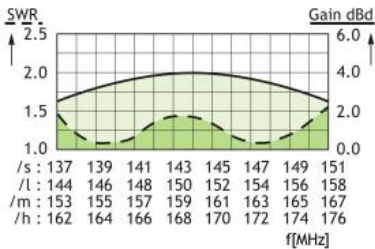
ORDERING

Type	Product No.	Frequency
CXL 2-3C/s	100000096	137 - 150 MHz
CXL 2-3C/l	100000097	144 - 157 MHz
CXL 2-3C/m	100000098	153 - 166 MHz
CXL 2-3C/h	100000095	162 - 175 MHz

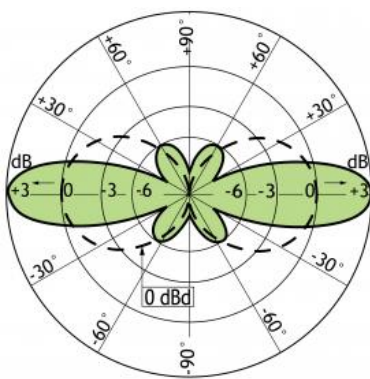


DIAGRAM

TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE) MULTI-PURPOSE MOUNTING BRACKET

