

Collinear, 5 dBd Base Station and Marine Antenna for the 450 MHz Band

DESCRIPTION

- CXL 450-5C/... is a 5 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers within 380 - 470 MHz band in 4 models.
- The antenna is provided with our "C" universal fixation bracket made of epoxy-coated, seawater resistant aluminium.
- The accompanying U-bolts and fittings are made of stainless steel.
- CXL 450-5C/... 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 carefully designed radiating element is sealed in a high-quality, glass fibre tube with low wind-load, 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.
- The exceptional mechanical capabilities of this antenna ensure long dependable service in all environments.



SPECIFICATIONS

Electrical	
Model	CXL 450-5C/...
Frequency	380 - 470 MHz (see ordering codes for sub-models)
Antenna Type	Collinear, broad-band
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	16 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	5.4 dBd (7.2 dBi)
VSWR	< 1.5:1
Passive Intermodulation	-150 dBc (3rd order, 2 x Tx @ 43 dBm)
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 008DE30

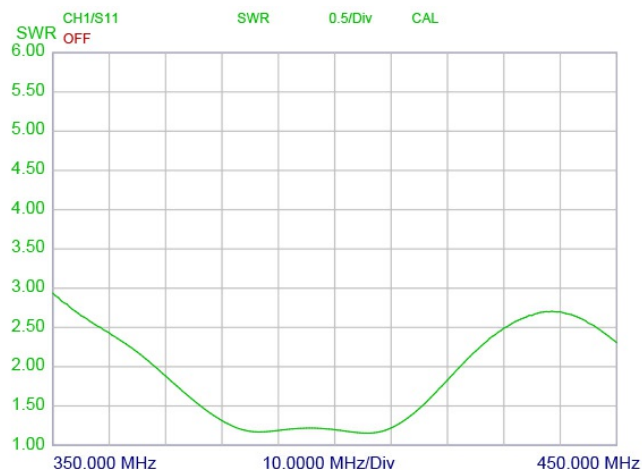
Mechanical	
Connection(s)	7/16 DIN(f) or 4.3-10(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated Clamps : Stainless steel
Colour	White (RAL 9003)
Wind Area	0.1 sq. m / 1.08 sq. ft.
Wind Load	142 N (160 km/h)
Dia. At Top End	38 mm / 1.5 in.
Dia. At Bottom End	38 mm / 1.5 in.
Height	Approx. 2790 mm / 109.84 in. (dep. on freq.) (s-model)
Weight	Approx. 3.8 kg / 8.38 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

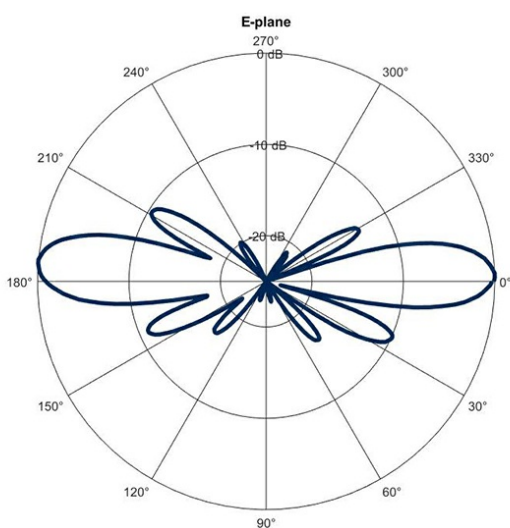
ORDERING

Model	Product No.	Frequency
CXL 450-5C/s-7/16 DIN(f)	100000849	380 - 410 MHz
CXL 450-5C/f-7/16 DIN(f)	100000850	406 - 430 MHz
CXL 450-5C/l-7/16 DIN(f)	100000851	420 - 450 MHz
CXL 450-5C/h-7/16 DIN(f)	100000852	440 - 470 MHz

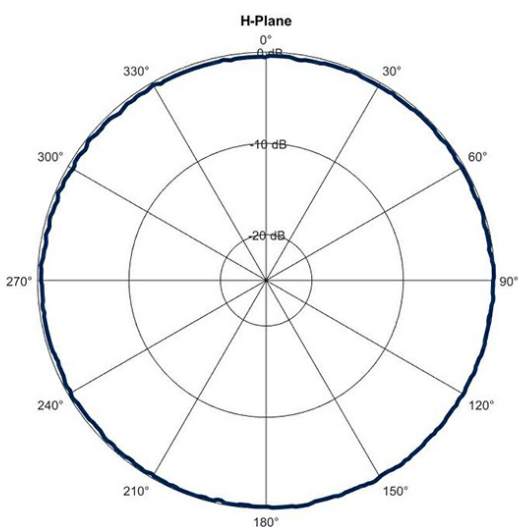
TYPICAL VSWR CURVE FOR CXL 450-5C/S



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET

