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



DESCRIPTION

- CXL 70-5C/… is a 5 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers within 350 - 620 MHz band in 9 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 70-5C/… 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, conical 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.

ORDERING

Model	Product No.	Frequency
CXL 70-5C/ls	100000593	350 - 370 MHz
CXL 70-5C/ss	100000594	360 - 390 MHz
CXL 70-5C/s	100000120	380 - 410 MHz
CXL 70-5C/f	100000115	406 - 430 MHz
CXL 70-5C/l	100000118	420 - 450 MHz
CXL 70-5C/h	100000117	440 - 470 MHz
CXL 70-5C/hh	100000595	470 - 490 MHz
CXL 70-5C/vh	100000596	490 - 520 MHz
CXL 70-5C/uh	100000597	590 - 614 MHz

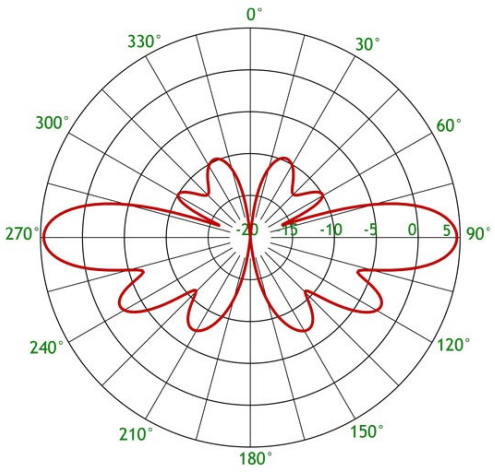
SPECIFICATIONS

Electrical		
Model	CXL 70-5C/...	
Frequency	30 MHz wide frequency segments within 350 - 620 MHz.	
Antenna Type	Collinear, broad-band	
Max. Input Power	150 W	
Polarisation	Vertical	
Pattern Type	Omnidirectional	
3 dB Beamwidth, E-Plane	18 °	
3 dB Beamwidth, H-Plane	Omnidirectional	
Impedance	50 Ω	
Gain	5 dBd (7.2 dBi)	
VSWR	**Type:** /ls /ss /s /f /l /h /hh /vh /uh	**VSWR: < 1.5:1** 350-370 MHz 360-380 MHz 380-400 MHz 406-426 MHz 420-440 MHz 440-460 MHz 470-490 MHz 490-510 MHz 590-614 MHz
		VSWR: < 2.0:1 380-390 MHz 400-410 MHz 426-430 MHz 440-450 MHz 460-470 MHz 510-520 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)	
HCM Code(s)	HCM000ND00, 009DE50	

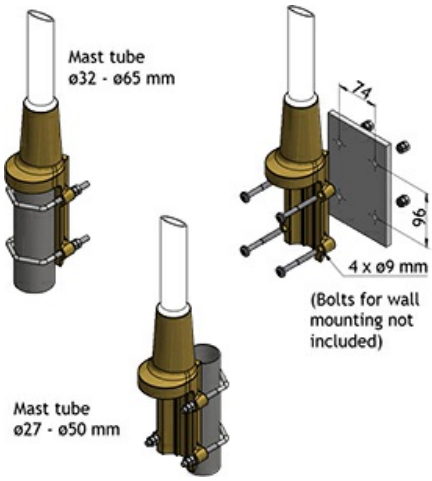
Mechanical	
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Seawater resistant aluminium, epoxy-coated Clamps: Stainless steel
Colour	White (RAL 9003)
Wind Area	0.045 sq. m / 0.48 sq. ft
Wind Load	57 N (160km/h)
Dia. At Top End	13 mm / 0.51 in.
Dia. At Bottom End	25 mm / 0.98 in.
Height	Approx. 2200 mm / 86.61 in. (dep. on freq.)
Weight	Approx. 2.8 kg / 6.17 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	IP66

TYPICAL RADIATION PATTERN (E-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



TYPICAL RADIATION PATTERN (H-PLANE)

