

## 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.



### SPECIFICATIONS

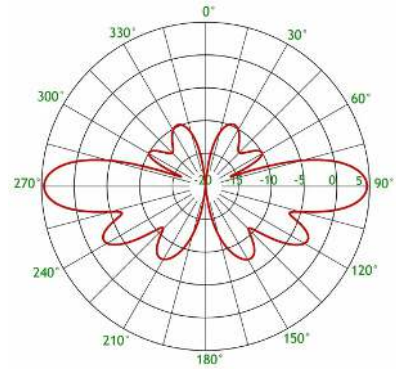
Electrical			
Model	CXL 70-5C/...		
Frequency	30 MHz wide frequency segments within 350 - 620 MHz.		
Antenna Type	Collinear, broad-band		
Max. Input Power	150 W		
Polarisation	Vertical		
Pattern Type	Omnidirectional		
3 dB Beamwidth, E-Plane	18 °		
3 dB Beamwidth, H-Plane	Omnidirectional		
Impedance	50 Ω		
Gain	5 dBd (7.2 dBi)		
VSWR	<b>Type:</b>	<b>VSWR: &lt; 1.5:1</b>	<b>VSWR: &lt; 2.0:1</b>
	/ls	350-370 MHz	380-390 MHz
	/ss	360-380 MHz	400-410 MHz
	/s	380-400 MHz	426-430 MHz
	/f	406-426 MHz	440-450 MHz
	/l	420-440 MHz	460-470 MHz
	/h	440-460 MHz	510-520 MHz
	/hh	470-490 MHz	
	/vh	490-510 MHz	
/uh	590-614 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 (160 km/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

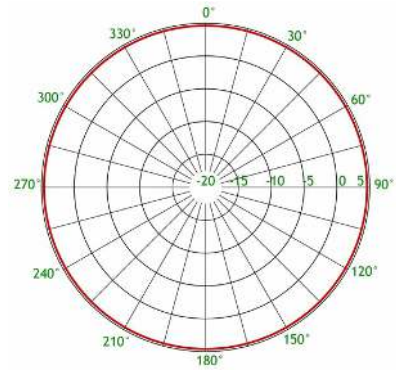
### ORDERING

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

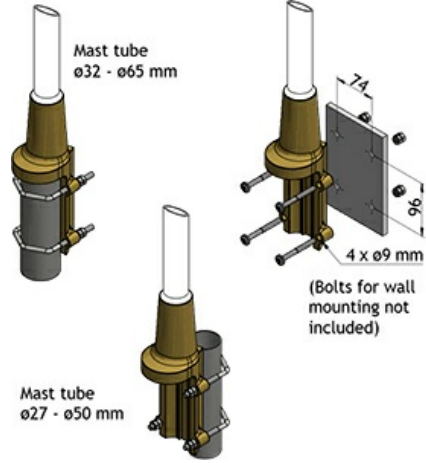
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



Mast tube  
ø32 - ø65 mm

Mast tube  
ø27 - ø50 mm

74  
96  
4 x ø9 mm

(Bolts for wall  
mounting not  
included)