

Collinear, 3 dBd Base Station and Marine Antenna for the 450 MHz Band

DESCRIPTION

- CXL 70-3C/... is a 3 dBd, vertically polarized, omnidirectional base station and marine antenna, which covers the 340 – 530 MHz band in 4 models with up to 10 MHz overlap.
- 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 70-3C/... 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 ensures long dependable service in all environments.



SPECIFICATIONS

Electrical	
Model	CXL 70-3C/...
Frequency	30 MHz wide frequency segments within 380 - 520 MHz. See model survey.
Antenna Type	Collinear, broad-band
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	30 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	3 dBd (5.2 dBi)
VSWR	< 1.5:1
Bandwidth	30 MHz
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 015DE50

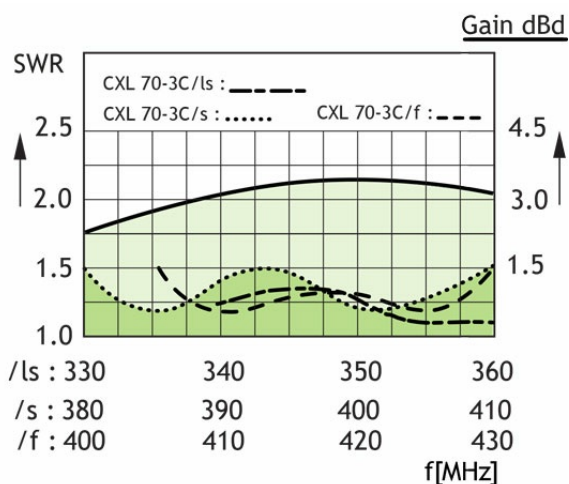
Mechanical	
Connection(s)	N(f)
Materials	Shroud : Polyurethane-coated glass fibre Mounting bracket : Seawater resistant aluminium, epoxy-coated Clamps : Stainless steel
Colour	White (RAL 9003)
Wind Area	0.032 sq. m / 0.34 sq. ft
Wind Load	40 N (160 km/h)
Dia. At Top End	16 mm / 0.63 in.
Dia. At Bottom End	25 mm / 0.98 in.
Height	Approx. 1450 mm / 57.09 in.
Weight	Approx. 2.4 kg / 5.29 lb.
Mounting	On 27 - 65 mm / 1.06 - 2.56 in. dia. mast tube

Environmental	
Operating temperature range	-40 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

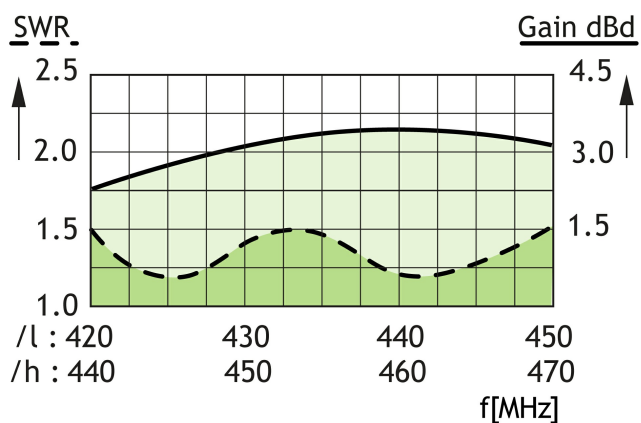
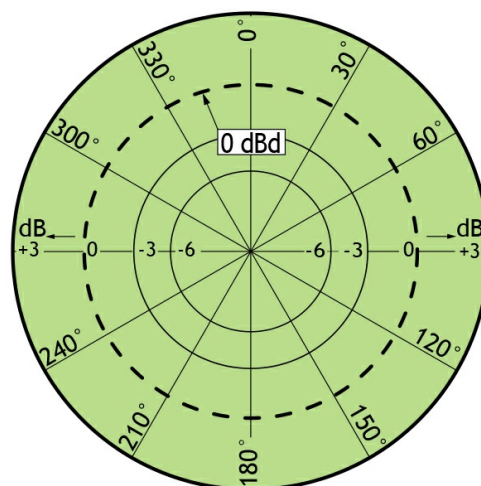
ORDERING

Model	Product No.	Frequency
CXL 70-3C/s	100000113	380 - 410 MHz
CXL 70-3C/f	100000109	406 - 430 MHz
CXL 70-3C/l	100000112	420 - 450 MHz
CXL 70-3C/h	100000110	440 - 470 MHz
CXL 70-3C/l/s	100000749	340 – 360 MHz
CXL 70-3C/vh	Contact for availability	460 – 490 MHz
CXL 70-3C/uh	Contact for availability	490 – 520 MHz

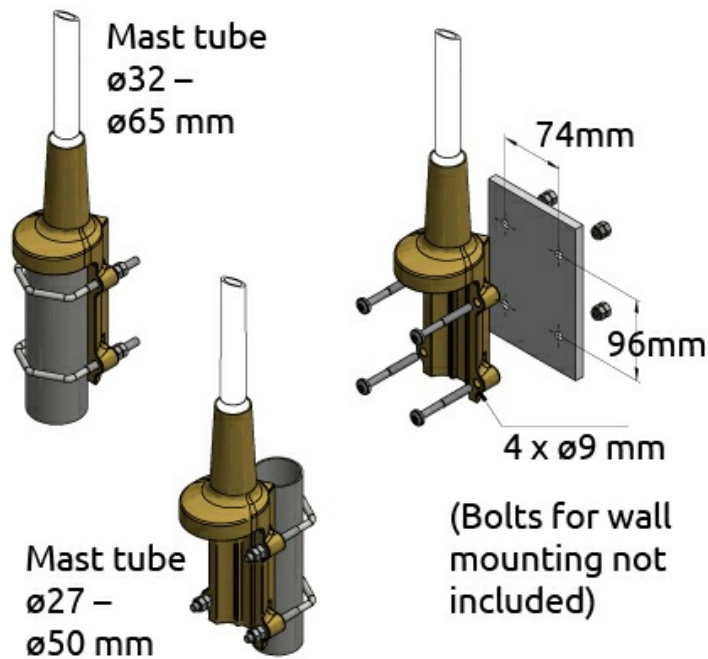
TYPICAL GAIN AND VSWR CURVES



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



TYPICAL RADIATION PATTERN (E-PLANE)

