

## Unity Gain Base Station and Marine UHF Antenna

### DESCRIPTION

- This rod-type UHF antenna is developed for use onboard ships as well as on masts and covers the 450 MHz band in three models.
- The 1" revolving nut mounting system makes it possible to mount the antenna in the mast, in the auxiliary mast or on the cross-beam. By means of Procom's flange mount type "FLG", it can easily be mounted even on the rooftop.
- This antenna type can be used for a wide variety of purposes. It is very popular and widely used in connection with 70 cm CELLULAR systems – as for instance the Nordic Mobile Telephone system NMT – making it possible to extend the – normally land based – CELLULAR telephone system for maritime mobile service as well.
- The antenna is a  $\frac{1}{2} \lambda$  design and this means that it needs neither loading coils, groundplane, radials nor other auxiliary arrangements.
- Bear in mind that the higher the antenna is mounted the better coverage.
- Avoid mounting the antenna parallel with or in the neighbourhood of other metal parts, such as masts, supporting wires etc. Free mounting and as high as possible is most preferable, otherwise the SWR and the radiation diagram will be influenced.
- The antenna is a grounded radiator antenna and therefore it shows a DC-short across the coaxial cable.
- A conical glass fibre tube completely encloses the carefully designed radiating element to assure long dependable service in all climates.

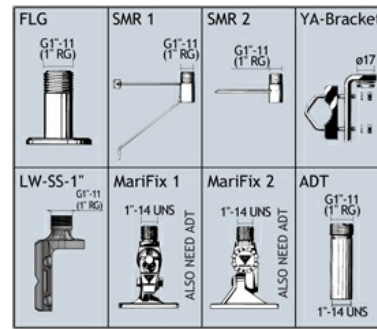


### SPECIFICATIONS

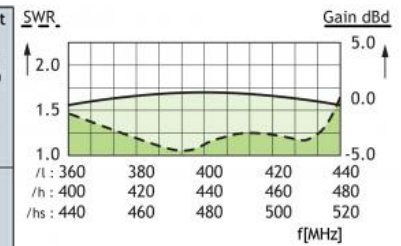
Electrical	
Model	CXL 70-1/...
Frequency	CXL 70-1/l : 380 - 430 MHz CXL 70-1/h : 420 - 470 MHz CXL 70-1/hs : 460 - 510 MHz
Antenna Type	Coaxial dipole, broad-banded
3 dB Beamwidth, H-Plane	Omnidirectional
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80 °
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	< 1.5:1
Maximum Input Power	150 W
Bandwidth	50 MHz
HCM Code(s)	
Mechanical	
Wind Area	0.0093 sq. m / 0.10 sq. ft
Connection(s)	N(f)
Materials	Shroud: Polyurethane-coated glass fibre Mounting bracket: Chromed brass
Colour	White (RAL 9003)
Height	600 mm / 23.62 in.
Wind Load	12 N (160km/h)
Dia. At Top End	12 mm / 0.47 in.
Weight	0.35 kg / 0.77 lb
Dia. At Bottom End	16 mm / 0.63 in.
Mounting	On 1" RG (G1" - 11) threaded water pipe or on optional mounting brackets (see accessories )
Environmental	
Operating Temperature Range	-30 °C to +70 °C
Survival Wind Speed	200 km/h
Ingress Protection	IP66

### DIAGRAM

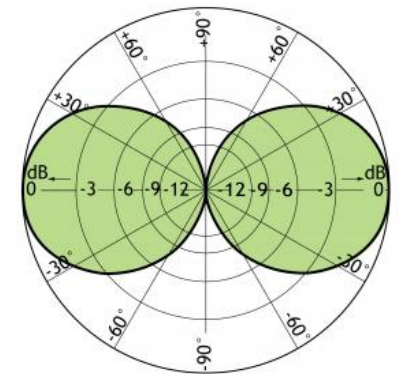
ACCESSORIES (to be ordered separately)



TYPICAL GAIN AND SWR CURVES



TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)

ORDERING

Type	Product No.	Frequency
CXL 70-1/l	110000137	380 - 430 MHz
CXL 70-1/h	110000136	420 - 470 MHz
CXL 70-1/hs	110000135	460 - 510 MHz

