Universal, Unity-Gain Base Station and Marine Antenna for the 160 MHz Band

DESCRIPTION

- This multi-purpose, omnidirectional, 0 dBd, rod-type base station and marine antenna covers the 160 MHz band in three models with 10 MHz overlap and can be used in a wide variety of applications.
- The antenna mount is made from a High Strength low Carbon Steel Alloy.
- The broad-banded ½ λ dipole antenna element is sealed in a high-quality conical glass fibre tube with low wind-load, which will ensure undisturbed performance by corrosive environments.
- The new LW-SS Mount is made from a High Strength low Carbon Steel Alloy well suited for extreme marine environments due to it's superior resistance to corrosion.
- The accompanying U-bolts and fittings are made of stainless steel.
- To be mounted on vertical or horizontal mast tubes, 16 to 54 mm in outer diameter.
- The cable can be led either on the outside or along the inside of the mast tube.
- Large bandwidth with respect to both VSWR and gain.
- CXL 150-1LW-SS-R/… is DC-grounded to substantially reduce noise caused by atmospherical discharges and consequently shows a DC-short across the coaxial cable.
- The CXL 150-1LW-SS-R/… is a vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna.

SPECIFICATIONS

Electrical	
Model	CXL 150-1LW-SS-R/...
Frequency	CXL 150-1LW-SS-R/s : 138 - 156 MHz CXL 150-1LW-SS-R/l : 146 - 165 MHz CXL 150-1LW-SS-R/h : 155 - 175 MHz
Antenna Type	Coaxial dipole, broad-banded
Max. Input Power	150 W
Polarisation	Vertical
Pattern Type	Omnidirectional
3 dB Beamwidth, E-Plane	80 °
3 dB Beamwidth, H-Plane	Omnidirectional
Impedance	50 Ω
Gain	0 dBd (2.2 dBi)
VSWR	CXL 150-1LW-SS-R/s : ≤ 1.5:1 CXL 150-1LW-SS-R/l : 146 - 163 MHz ≤ 1.5:1 146 - 165 MHz ≤ 1.75:1 CXL 150-1LW-SS-R/h : 156 - 174 MHz ≤ 1.5:1 155 - 175 MHz ≤ 1.75:1
Bandwidth	18 - 21 MHz depending on model
Antistatic Protection	All metal parts DC-grounded (Connector shows a DC-short)
HCM Code(s)	HCM000ND00, 040DE00

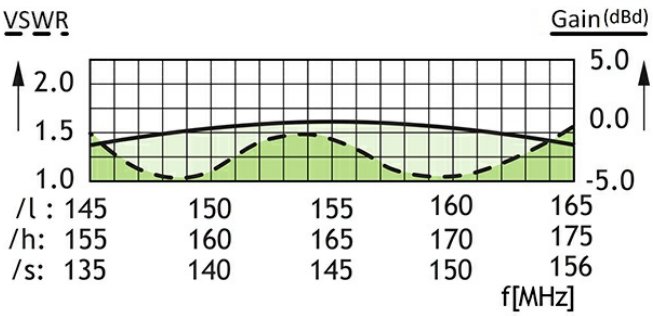
Mechanical	
Connection(s)	N(f)
Materials	Radome : Polyurethane-coated glass fibre Mounting bracket : Stainless acid-proof steel (AiSi 316L) U-bolt and fittings : Stainless steel (AiSi 316L)
Colour	White (RAL 9003)
Wind Area	0.022 sq. m / 0.24 sq. ft
Wind Load	32 N (160 km/h)
Dia. At Top End	17 mm / 0.67 in.
Dia. At Bottom End	23 mm / 0.91 in.
Height	Approx. 1300 mm / 51.18 in.
Weight	Approx. 1.0 kg / 2.20 lb.
Mounting	On 16 to 54 mm dia. mast tube

Environmental	
Operating temperature range	-45 °C to +70 °C
Survival Wind Speed	260 km/h
Ingress Protection	IP66

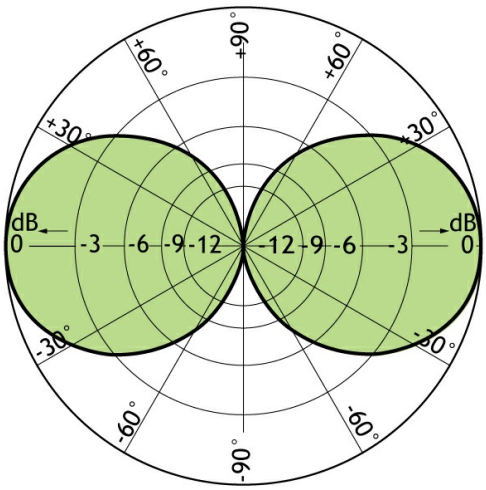
ORDERING

Model	Product No.	Frequency
CXL 150-1LW-SS-R/s	110000374	138 - 156 MHz
CXL 150-1LW-SS-R/l	110000375	146 - 165 MHz
CXL 150-1LW-SS-R/h	110000376	155 - 175 MHz

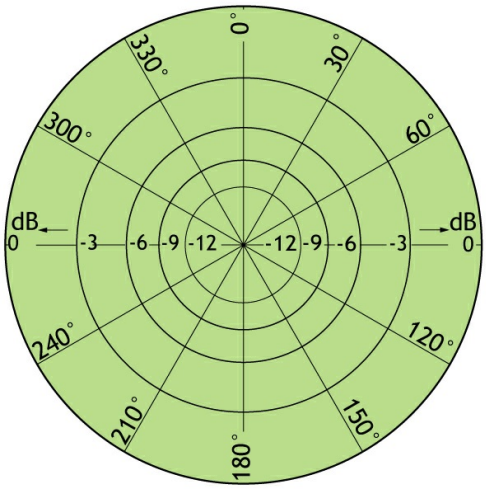
TYPICAL GAIN AND VSWR CURVE



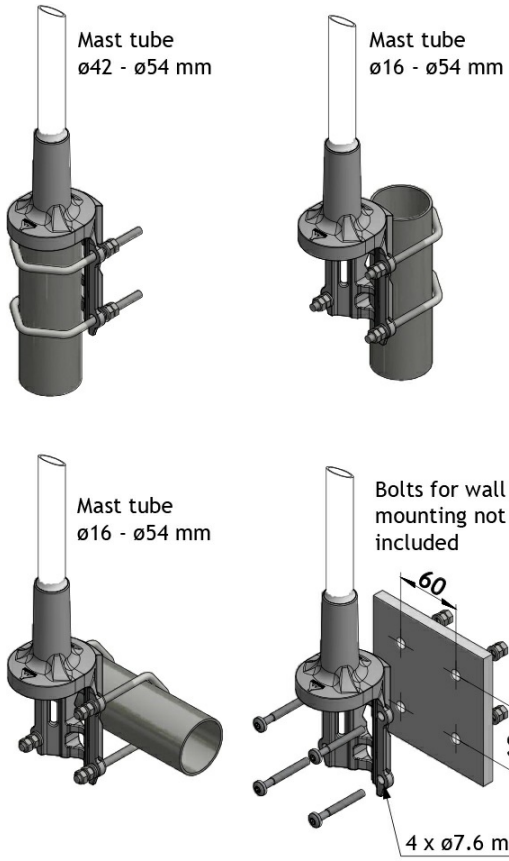
TYPICAL RADIATION PATTERN (E-PLANE)



TYPICAL RADIATION PATTERN (H-PLANE)



MULTI-PURPOSE MOUNTING BRACKET



PLEASE NOTE

The antenna is delivered with a DC-connection between the antenna element and the mounting bracket.