

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 SWR 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.

ORDERING

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



SPECIFICATIONS

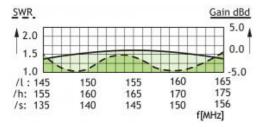
| Electrical | |
|-------------------------|---|
| Model | CXL 150-1LW-SS-R/ |
| Frequency | CXL 150-1LW-SS-R/s : 138 - 156 MHz CXL 150-1LW-SS-R/l : 146 - 165 MHz CXL 150-1LW-SS-R/h : 155 - 175 MHz |
| Antenna Type | Coaxial dipole, broad-banded |
| Max. Input Power | 150 W |
| Polarisation | Vertical |
| 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 : \leq 1.5:1 CXL 150-1LW-SS-R/l : 146 - 163 MHz \leq 1.5:1 146 - 165 MHz \leq 1.75:1 CXL 150-1LW-SS-R/h : 156 - 174 MHz \leq 1.5:1 155 - 175 MHz \leq 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) | |

| 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 304) |
| Colour | White (RAL 9003) |
| Wind Area | 0.022 sq. m / 0.24 sq. ft |
| Wind Load | 32 N (160km/h) |
| Dia. At Top End | 17 mm / 0.67 in. |
| Dia. At Bottom End | 23 mm / 0.91 in. |
| Height | 1300 mm / 51.18 in. |
| Weight | 1.0 kg / 2.20 lb |
| Mounting | On 16 to 54 mm dia. mast tube |

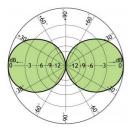
| Environmental | |
|-----------------------------|----------------|
| Operating Temperature Range | -45°C to +70°C |
| Survival Wind Speed | 260 km/h |
| Ingress Protection | IP66 |



TYPICAL GAIN AND SWR CURVES



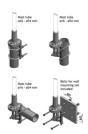
TYPICAL RADIATION PATTERN (E-PLANE)



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.