



Lightweight, 3 dBd Base Station and Marine Antenna for the 150 MHz Band

DS040617



Description

- 3 dBd, vertically polarised, omnidirectional base station and marine antenna, which covers the VHF-band in 5 models.
- Provided with the sturdy mast mount – a lightweight, multipurpose, epoxycoated mounting bracket made of non-corrosive aluminium.
- 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.
- The phasing of the radiating elements is adjusted to yield maximum gain in the horizontal plane, with the level of the sidelobes reduced to a minimum.
- The carefully designed, broad-banded antenna element is sealed in a high-quality conical glass fiber tube with low wind-load, which will ensure performance undisturbed by corrosive environments.
- To substantially reduce noise caused by atmospheric discharges, all metal parts in the antenna are DC-grounded. Consequently, the antenna shows a DC-short across the coaxial cable.
- Vibration-proof, lightweight, slim-line, corrosion resistant, modern style base station and marine antenna.

Electrical Specifications

| Parameter | Value |
|-------------------------|---|
| Frequency | Bands within 139 - 175 MHz |
| Max. Input Power | 150 W |
| Polarisation | Vertical |
| 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 | 9 MHz |
| Antistatic Protection | All metal parts DC-grounded (Connector shows a DC-short) |

Mechanical Specifications



| Parameter | Value |
|--------------------|---|
| Connection(s) | N(f) |
| Connector Torque | 0.7 - 1.1 Nm |
| Materials | Shroud : Polyurethane-coated glass fiber Mounting bracket : Seawater resistant aluminum, epoxy-coated U-bolt and fittings : Stainless steel |
| Color | White (RAL 9003) |
| Wind Area | 0.0651 sq. m / 0.70 sq. ft |
| Wind Load | 82 N (160 km/h) |
| Dia. At Top End | 15 mm / 0.59 in. |
| Dia. At Bottom End | 23 mm / 0.91 in. |
| Height | Approx. 2.8 m / 110.24 in. |
| Weight | Approx. 1.4 kg / 3.09 lb. |
| Mounting | On 16 to 54 mm dia. mast tube |

Environmental

| Parameter | Value |
|-----------------------------|------------------|
| Operating temperature range | -30 °C to +70 °C |
| Survival Wind Speed | 200 km/h |
| Ingress Protection | IP66 |

Ordering

| Model | Frequency |
|----------------|---------------|
| 104A-36T-3-0-7 | 139 - 147 MHz |
| 104A-39I-3-0-7 | 146 - 155 MHz |
| 104A-39J-3-0-7 | 153 - 162 MHz |
| 104A-40F-3-0-7 | 158 - 167 MHz |
| 104A-40G-3-0-7 | 166 - 175 MHz |

Typical VSWR Curve

