

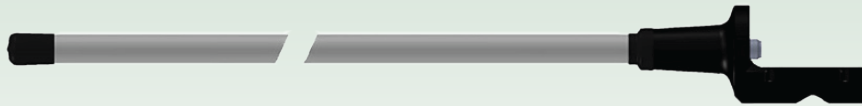
# 1-Port Omnidirectional Antenna

154–174MHz



DS040350-1A

Model #: 104A-39E-00-00-07-N



## Description

This universal antenna with a broad frequency band and rugged construction is ideal for both base station and marine deployments. Radiating elements are encased in a weather-resistant, low-loss fiberglass radome. The size and mounting fixtures allow for easy storage and fast installation. Ideal for use where reliability is of the utmost importance. With a sturdy and strong construction, these antennas have been designed for a long lifetime.

## Features

- This multi-purpose, omnidirectional, 0 dBd (2 dBi), rod-type base station and marine antenna covers the 154–174 MHz band and can be used in a wide variety of applications
- The broad-banded  $\frac{1}{2} \lambda$  dipole antenna element is sealed in a high-quality conical fiberglass tube with low wind-load, which will ensure undisturbed performance by corrosive environments
- Shipped with the sturdy “LW” mast mount – a lightweight, multipurpose, epoxy-coated mounting bracket made of non-corrosive aluminum
- Accompanying U-bolts and fittings are made of stainless steel
- Can be mounted vertically or horizontally on mast tubes with an outer diameter of 16–54 mm (0.6–2.1 in)
- Cable can be led either on the outside or along the inside of the mast tube
- Wide bandwidth with respect to both VSWR and gain
- DC-grounded to substantially reduce noise caused by atmospherical discharges and consequently shows a DC-short across the coaxial cable
- Vibration-proof, lightweight, slim-line, corrosion-resistant, modern style base station and marine antenna

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## Electrical Specifications

| Parameter                   | Value                                                    |
|-----------------------------|----------------------------------------------------------|
| Frequency Range (MHz)       | 154–174                                                  |
| Polarization                | Vertical                                                 |
| Gain                        | 0 dBd (2.2 dBi)                                          |
| Azimuth Beamwidth (3 dB)    | Omnidirectional                                          |
| Elevation Beamwidth (3 dB)  | 80°                                                      |
| Impedance (Ohms)            | 50Ω                                                      |
| VSWR                        | ≤ 1.5:1                                                  |
| Bandwidth                   | 20 MHz                                                   |
| Maximum Input Power (Watts) | 150 W                                                    |
| Antistatic Protection       | All metal parts DC-grounded (Connector shows a DC-short) |
| HCM Code(s)                 | HCM000ND00, 040DE00                                      |

## Mechanical Specifications

| Parameter                                                  | Value                                                                     |
|------------------------------------------------------------|---------------------------------------------------------------------------|
| Overall Height                                             | 1300 mm (51.2 in)                                                         |
| Diameter at Top End                                        | Ø8 mm (0.3 in)                                                            |
| Diameter at Bottom End                                     | Ø16 mm (0.6 in)                                                           |
| Mounting                                                   | On 16–54 mm (0.6–2.1 in) diameter mast tube                               |
| Antenna Weight                                             | Approx. 0.8 kg (1.8 lbs)                                                  |
| Wind Area                                                  | 0.0172 m <sup>2</sup> (0.19 ft <sup>2</sup> )                             |
| Wind Load at 160 km/h                                      | 22 N (5 lbf)                                                              |
| Connector Type                                             | (1x) N Female at Bottom                                                   |
| Radome Material                                            | Polyurethane-Coated Fiberglass                                            |
| Radome Color                                               | White RAL9003                                                             |
| Mounting Hardware                                          | Seawater-resistant aluminum, epoxy-coated; Clamps: Stainless steel        |
| Shipping Weight                                            | 0.75 kg (1.7 lbs)                                                         |
| Packing Dimensions<br><i>Length x Diameter x Thickness</i> | 1475 x 50 x 2 mm (58.1 x 2.0 x 0.1 in)                                    |
| Shipping Comment                                           | Universal stainless steel mast mounting clamp (LW-SS-1) packed separately |

## Environmental Specifications

| Parameter             | Value                          |
|-----------------------|--------------------------------|
| Operating Temperature | -30° to +70°C (-22° to +158°F) |
| Survival Wind Speed   | 200 km/h (124 mph)             |
| Ingress Protection    | IP66                           |