

# 1-Port Omnidirectional Antenna

144–162MHz



DS040348-1A

Model #: 104A-38F-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 144–162 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

**TX RX Systems Inc.**

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## Electrical Specifications

Parameter	Value
Frequency Range (MHz)	144–162
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	18 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 <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

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