

## Product Brief



### ANT-868-MHW

## 868 MHz Helical Dipole LPWA Antenna

MHW series antennas are durable remote-mount adhesive-backed dipole antennas that can be attached permanently to a variety of non-conductive surfaces such as windows, drywall, ceiling tiles, and most plastic surfaces.

Providing excellent performance for low-power, wide-area (LPWA) wireless applications, the MHW series antennas are available with either, 2.0 m (78.7 in) or 4.6 m (181.1 in) of RG-174 coaxial cable terminated in an SMA plug (male pin) connector.



### Features

- Performance summary
  - VSWR:  $\leq 1.3$
  - Peak Gain: 4.0
  - Efficiency: 54%
- Omnidirectional pattern
- Rugged & damage-resistant
- Durable adhesive backing
- Available with 2.0 m or 4.6 m of RG-174 coaxial cable
- SMA plug (male pin) connector

### Applications

- Low-power, wide-area (LPWA) applications
  - LoRaWAN®
  - Sigfox®
- Remote sensing, monitoring and control
  - Security systems
  - Industrial machinery
- Internet of Things (IoT) devices

### Ordering Information

Part Number	Description
ANT-868-MHW-SMA-L	4.6 m (181.1 in) RG-174 coax cable terminated in an SMA plug (male pin)
ANT-868-MHW-SMA-S	2.0 m (78.7 in) RG-174 coax cable terminated in an SMA plug (male pin)

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

ANT-868-MHW	862 MHz to 876 MHz
VSWR (max)	1.3
Peak Gain (dBi)	4.0
Average Gain (dBi)	-2.8
Efficiency (%)	54
Polarization	Linear
Radiation	Omnidirectional
Max Power	10 W
Wavelength	1/2-wave
Electrical Type	Dipole
Impedance	50 Ω
Cable	2.0 m (78.7 in) or 4.6 m (181.1 in) of RG-174 coaxial cable
Connection	SMA plug (male pin)
Weight	ANT-868-MHW-SMA-S: 44.0 g (1.60 oz) ANT-868-MHW-SMA-L: 76.5 g (2.70 oz)
Dimensions	138.0 mm x 15.5 mm x 9.2 mm (5.43 in x 0.61 x 0.36 in)
Operating Temperature Range	-20 °C to +70 °C

VSWR

Figure 1 provides the voltage standing wave ratio (VSWR) across the antenna bandwidth. VSWR describes the power reflected from the antenna back to the radio. A lower VSWR value indicates better antenna performance at a given frequency. Reflected power is also shown on the right-side vertical axis as a gauge of the percentage of transmitter power reflected back from the antenna.

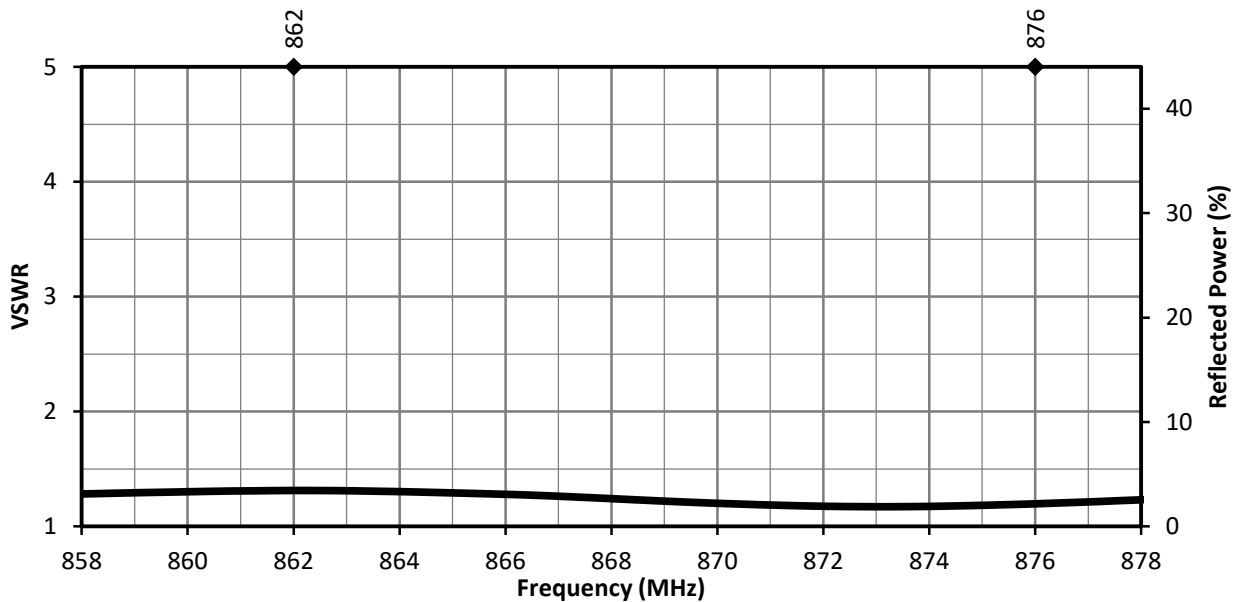


Figure 1. ANT-868-MHW Antenna VSWR

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