Product Brief

ANT-DB1-LPD-125
Panel-Mount Dipole WiFi/WLAN Antenna

The ANT-DB1-LPD-125 (LPD) is a panel-mount dipole antenna for WiFi/WLAN/U-NII 2.4 GHz and 5 GHz frequency band applications.

The snap-in panel mount provides for easy and secure installation and the hinged whip with 3-position detent allows for optimal antenna positioning.

Connection is made to the radio via a 125 mm long, 1.13 mm coaxial cable terminated in an MHF1/U.FL-compatible plug connector.

Features

- 2.4 GHz
  - VSWR: ≤ 1.5
  - Peak Gain: 2.8 dBi
  - Efficiency: 85%
- 5 GHz
  - VSWR: ≤ 1.5
  - Peak Gain: 4.5 dBi
  - Efficiency: 63%
- Snap-in panel mount
  - 9.5 mm (0.37 in) diameter hole
- 93.7 mm (3.69 in) long
- Hinged with detents for straight, 45 degree and 90 degree positioning
- MHF1/U.FL-compatible plug (female socket) connector attached to 125 mm of 1.13 mm coax cable
- Omnidirectional radiation pattern

Applications

- Single- and dual-band WiFi / WLAN / 802.11
  - WiFi 4, WiFi 5
- U-NII and ISM applications
- 2.4 GHz applications
  - Bluetooth® and ZigBee®
- Smart Home networking
- Sensing and remote monitoring
- Internet of Things (IoT) devices
- Gateways

Ordering Information

Part Number	Description
ANT-DB1-LPD-125	Antenna with MHF1/U.FL-compatible connector on 125 mm (4.92 in) 1.13 mm coax cable

Available from Linx Technologies and select distributors and representatives.

Electrical Specifications

ANT-DB1-LPD-125	2.4 GHz	5 GHz
Frequency Range	2.4 GHz to 2.485 GHz	5.15 GHz to 5.85 GHz
VSWR (max.)	1.5	1.5
Return Loss (max.)	-14.7	-14.2
Peak Gain (dBi)	2.8	4.5
Average Gain (dBi)	-0.8	-2.5
Efficiency (%)	85	63
Polarization	Linear	
Radiation	Omnidirectional	
Max Power	10 W	
Wavelength	1/2-wave	
Electrical Type	Dipole	
Impedance	50 Ω	
Connection	MHF1/U.FL-compatible plug, female socket	
Coaxial Cable	Type: 1.13 mm / Length: 125 mm (4.92 in)	
Weight	6.1 g (0.22 oz)	
Height	93.7 mm (3.69 in)	
Operating Temperature Range	-20 °C to +85 °C	

Electrical specifications and plots measured in Bent-90 configuration.

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.

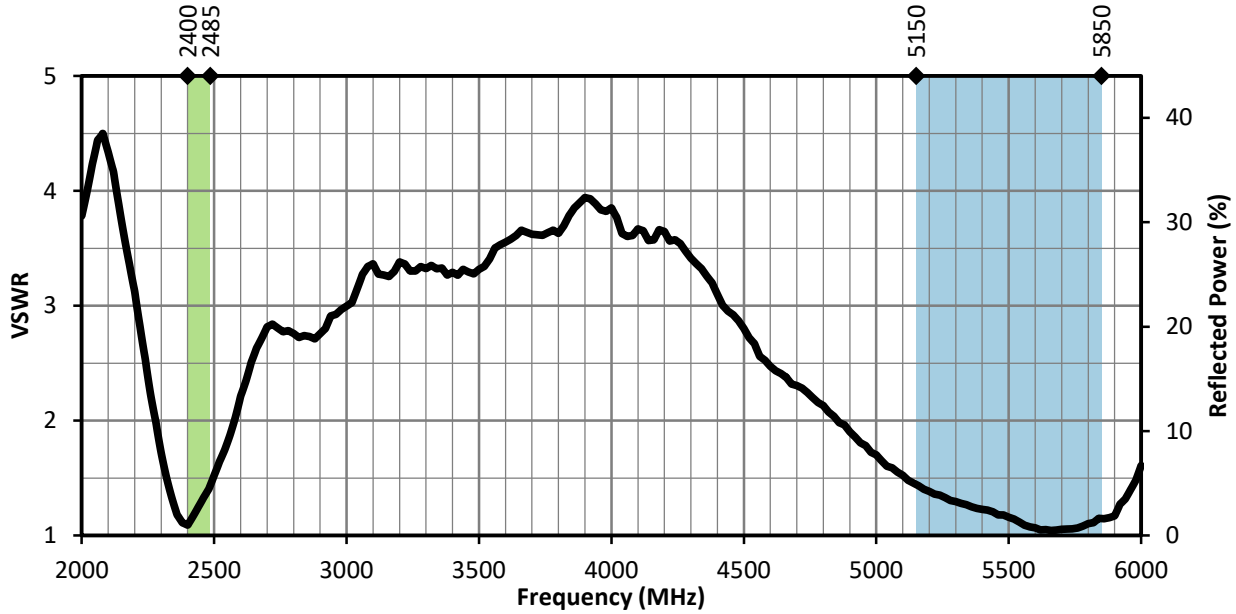

Figure 1. ANT-DB1-LPD-125 VSWR with Frequency Band Highlights