

# ANT-DB1-RMT-xxx

## Data Sheet

### Product Description

Designed for permanent mounting through a metal surface such as an automobile roof or trunk, this compact RMT antenna offers outstanding performance in a durable and futuristic housing. The antenna may be operated at either or both of two frequency bands. It is supplied with 14.1 feet (4.3 m) of RG-58 cable and can be terminated in a standard SMA, FCC Part 15 compliant RP-SMA connector or a TNC connector.

### Features

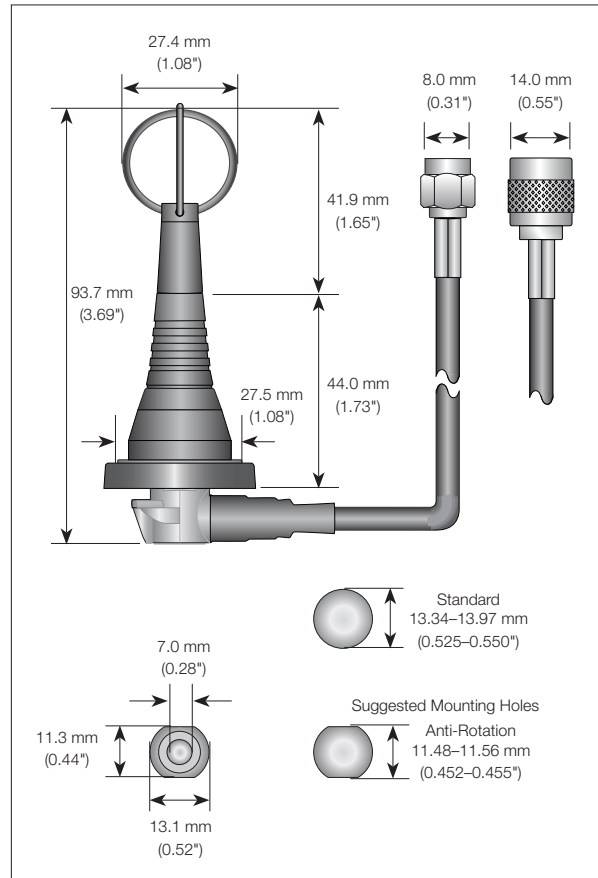
- Dual-band (824–960MHz and 1.71–1.99GHz)
- Compact & futuristic
- Through-hole mount
- Low VSWR
- Excellent performance
- Omni-directional pattern
- Fully weatherized
- Durable construction
- SMA, RP-SMA or TNC connector

### Electrical Specifications

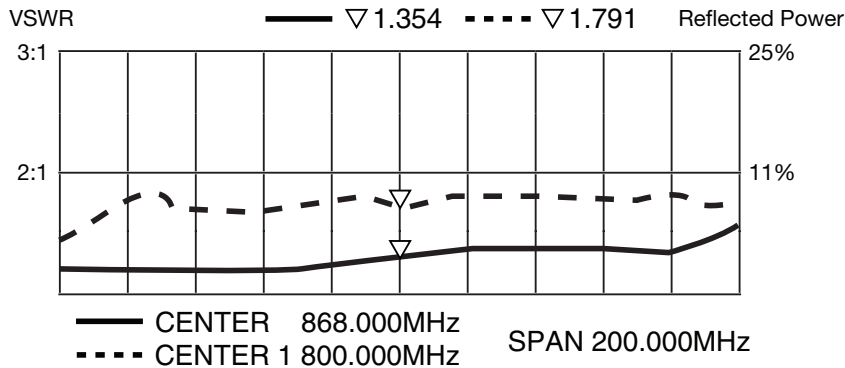
Recom. Freq. Range:	Band 1: 860–960MHz Band 2: 1.71–1.88GHz
Wavelength:	¼-wave
VSWR:	Band 1: ≤ 1.5 typ. at center Band 2: ≤ 2.7 typ. at center
Impedance:	50-ohms
Oper. Temp. Range:	–40°C to +80°C
Connector:	SMA, RP-SMA or TNC
Cable:	14.1' (4.3 m) RG-58 coax

### Ordering Information

ANT-DB1-RMT-SMA (with SMA connector)  
 ANT-DB1-RMT-RPS (with RP-SMA connector)  
 ANT-DB1-RMT-TNC (with TNC connector)



## VSWR Graph



### What is VSWR?

The Voltage Standing Wave Ratio (VSWR) is a measurement of how well an antenna is matched to a source impedance, typically 50-ohms. It is calculated by measuring the voltage wave that is headed toward the load versus the voltage wave that is reflected back from the load. A perfect match will have a VSWR of 1:1. The higher the first number, the worse the match, and the more inefficient the system. Since a perfect match cannot ever be obtained, some benchmark for performance needs to be set. In the case of antenna VSWR, this is usually 2:1. At this point, 88.9% of the energy sent to the antenna by the transmitter is radiated into free space and 11.1% is either reflected back into the source or lost as heat on the structure of the antenna. In the other direction, 88.9% of the energy recovered by the antenna is transferred into the receiver. As a side note, since the “:1” is always implied, many data sheets will remove it and just display the first number.

### How to Read a VSWR Graph

VSWR is usually displayed graphically versus frequency. The lowest point on the graph is the antenna’s operational center frequency. In most cases, this will be different than the designed center frequency due to fabrication tolerances. The VSWR at that point denotes how close to 50-ohms the antenna gets. Linx specifies the recommended bandwidth as the range where the typical antenna VSWR is less than 2:1.

---

## TE TECHNICAL SUPPORT CENTER

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico:	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31 (0) 73-6246-999
China:	+86 (0) 400-820-6015

## te.com

TE Connectivity, TE, TE connectivity (logo), Linx and Linx Technologies are trademarks owned or licensed by the TE Connectivity Ltd. family of companies. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE Connectivity warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations TE Connectivity will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the TE Connectivity product is installed. Useful lifetime of the original end product may vary but is not warranted to exceed one (1) year from the original date of the end product purchase.

©2023 TE Connectivity. All Rights Reserved.

04/23 Original