# ANT-DB1-RAF-RPSMA Antenna

N-Tron Networking Series



### **Compact Dual-Band 1/2 Wave Antenna**

The ANT-DB1-RAF-RPSMA is a compact, dual-band, 1/2 wave antenna covering the 2.45 and 5.8GHz bands. The antenna features a tilt and swivel joint which allows it to be oriented at straight or right angles to the product or folded for storage and shipment. It attaches to the 702-W via an RP-SMA connector

#### **702-W APPLICATIONS**

- Wireless LAN applications
- Client antennas
- 802.11b/g/n applications

#### **SPECIFICATIONS**

Band 1: 2.4Ghz Frequencies: Band 2: 5.8GHz

Gain @ 2.4GHz 2dBi Gain @ 5.8GHz 4dBi VSWR: < 2 Impedance: 50 ohms Dimensions (Length x Diameter ): 4.13" x 0.43"

104.9mm x 11mm

### Range Estimates - 2.4GHz

Throughput	26Mbps	100Mbps
Distance (Miles)	1.35	0.12
Distance (kilometers)	2.18	.19
Tx Power	22dBm	15dBm
Receive Sensitivity	-91dBm	-77dBm
Number of Spacial Streams	2	2

### Range Estimates - 5.8GHz

Throughput	26Mbps	100Mbps
Distance (Miles)	0.81	0.07
Distance (kilometers)	1.30	.12
Tx Power	22dBm	15dBm
Receive Sensitivity	-90dBm	-76dBm
Number of Spacial Streams	2	2

\*Given the following parameters:

- Free Space loss / 2-ray ground reflection models
- Antenna is mounted directly nto an *N-TRON 702-W* Ethernet Radio mounted twenty-five (25) feet above ground level.
- Clear line of sight between radios with no obstructions of the first Fresnel Zone
- 20MHz wide signal
- Center frequency = 2.452GHz or 5.805GHz
- 10dB loss assumed for weather conditions

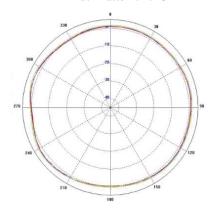
Range estimates are theoretical. Actual results may vary based on installation conditions. A site survey should be performed as part of the planning process to determine the presence of RF interference and identify optimum installation locations for access points and antennas.



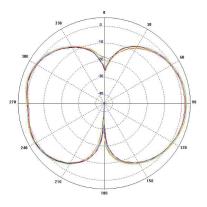


## **▶▶▶** ANT-DB1-RAF-RPSMA Specifications

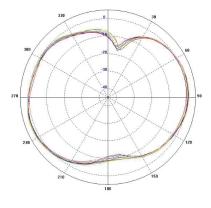
Azimuth Pattern: 2.4GHz



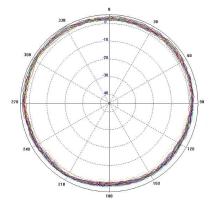
Elevation Pattern: 2.4GHz



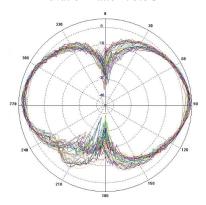
Elevation Side Pattern: 2.4GHz



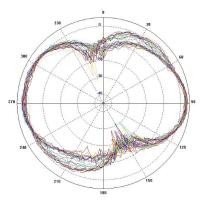
Azimuth Pattern: 5.8GHz



Elevation Pattern: 5.8GHz



Elevation Side Pattern: 5.8GHz





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