

# Part No. X9000294-W3DRMB

## External Hinged Wi-Fi Dual Band Antenna

**2.4 GHz, 5 GHz**

Supports : Wi-Fi applications, Agriculture, Automotive, Bluetooth, ZigBee, WLAN, Smart Home, HealthCare, Gateways, Routers



X9000294 is a hinged dipole antenna that can be mounted easily with RP-SMA male connector. It is ideal for Wi-Fi applications, Bluetooth, ZigBee, and LAN applications and with the high gain performance, it ensures reliable communications in both 2.4 GHz and 5GHz bands.

### External Wi-Fi Dual Band Antenna

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#### KEY BENEFITS

##### Quicker Time-to-Market

Standard part means fewer design changes. Quickly implementation Easy Assembly using RP-SMA or SMA

##### Best in Class Performance

External antennas are designed to maintain high efficiency in a variety of device configurations

##### RoHS Compliant

Products are the latest RoHS version compliant

#### APPLICATIONS

- Embedded design
- Bluetooth
- Gateway, Access Point
- Handheld
- Telematics
- Tracking
- Healthcare M2M, Industrial devices
- Smart Grid
- OBD-II
- IoT

#### Extensive RF Experience

Our external antennas are supported by documentation and, when needed, by the expertise of RF engineers who have integrated hundreds of antenna designs into wireless devices.

#### Global Operations & Design Support

Ethertronics' global operations encompass an integrated network of design centers that provide local customer support.

#### Electrical Specifications

Typical Characteristics in Free Space, tested in 90° bent position

Frequency (GHz)	2.400 – 2.485	5.150 – 5.850
Return Loss	<-12 dB	<-9 dB
Peak Gain	3.2 dBi	4.5 dBi
Average Efficiency	75%	60%
Polarization	Vertical	
Feed Point Impedance	50 ohm	

#### Mechanical Specifications & Ordering Part Number

Ordering Part Number	X9000294-W3DRMB
Dimensions (mm)	157.50 ± 3.00 height 17.65 ± 0.20 width
Connector Type	RP-SMA Male
Weight (grams)	5
Hinge	Foldable 90° at the hinge level
Color	Black ( white is available upon request )
Operating Temperature (°C)	-40 to +120
Radome Material	TPEE



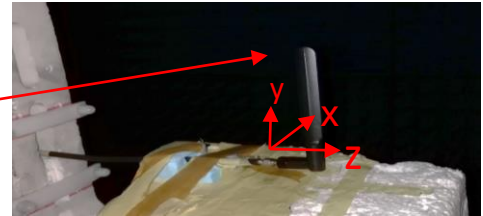
2.4 / 5 GHz External Hinged Wi-Fi antenna specifications  
Ethertronics produces a wide variety of standard and custom antennas to meet user needs

**Return Loss, Efficiency, and Peak Gain Plots**

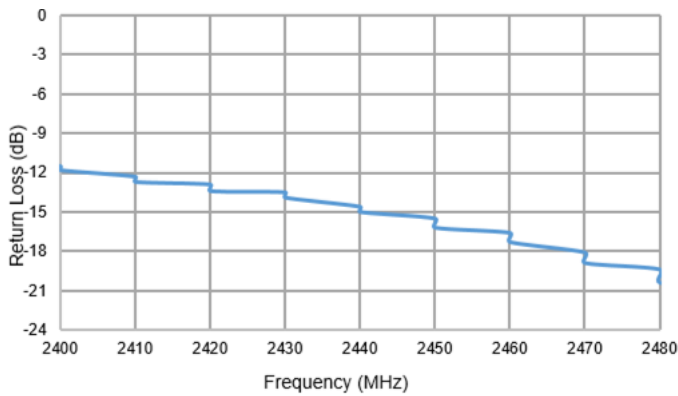
Typical performance, measured in free space, in 90° bent position



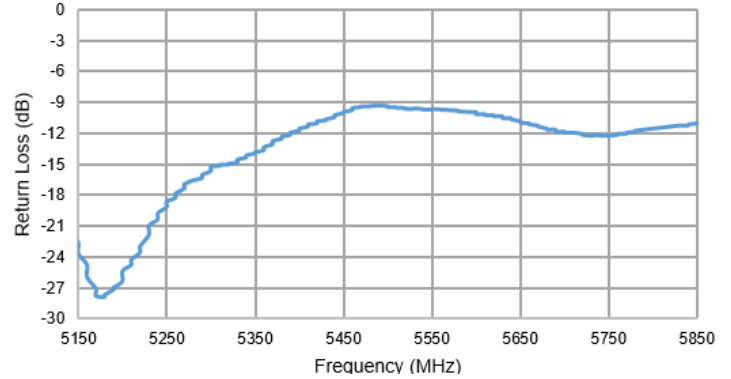
X9000294-W3DRMB



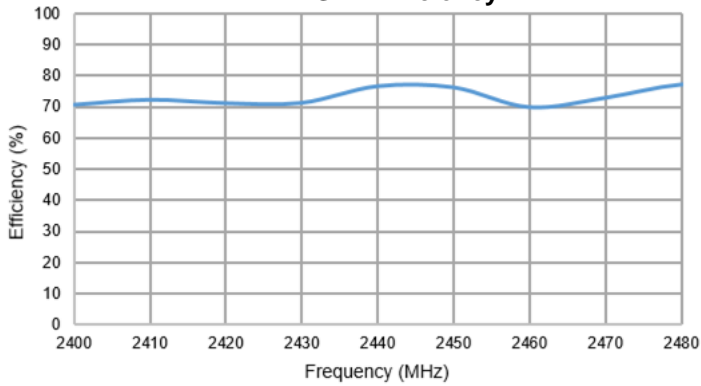
**2.4 GHz Return Loss**



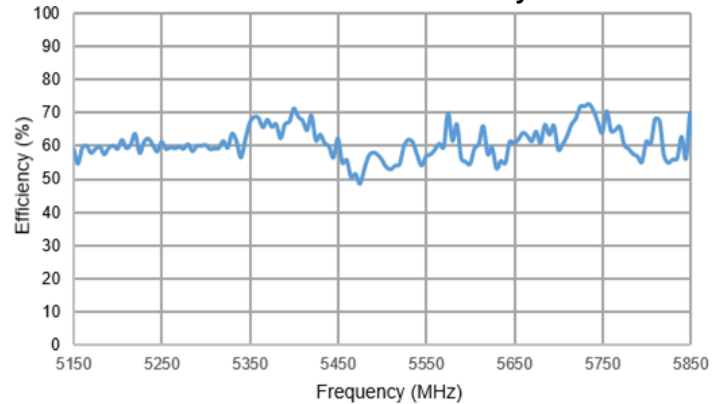
**5 GHz Return Loss**



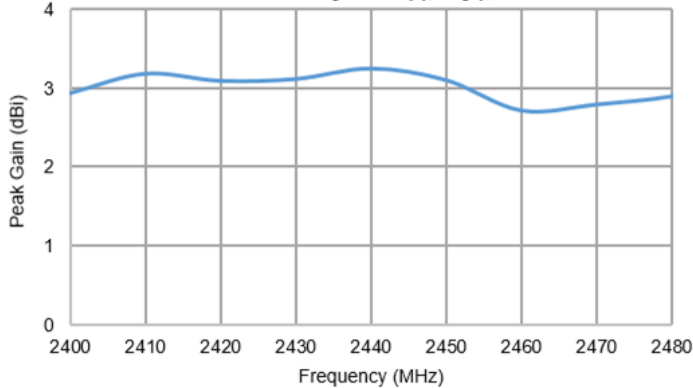
**2.4 GHz Efficiency**



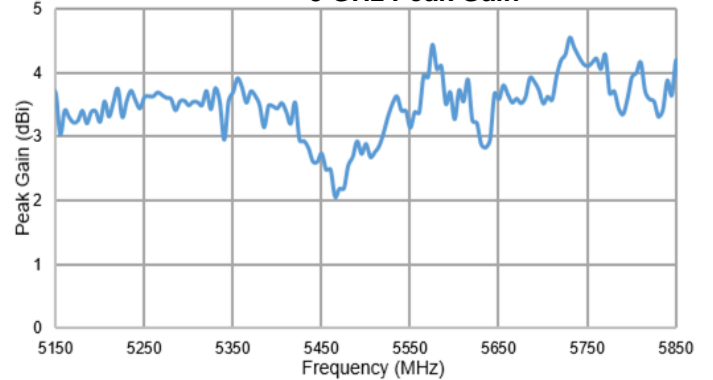
**5 GHz Efficiency**



**2.4 GHz Peak Gain**



**5 GHz Peak Gain**

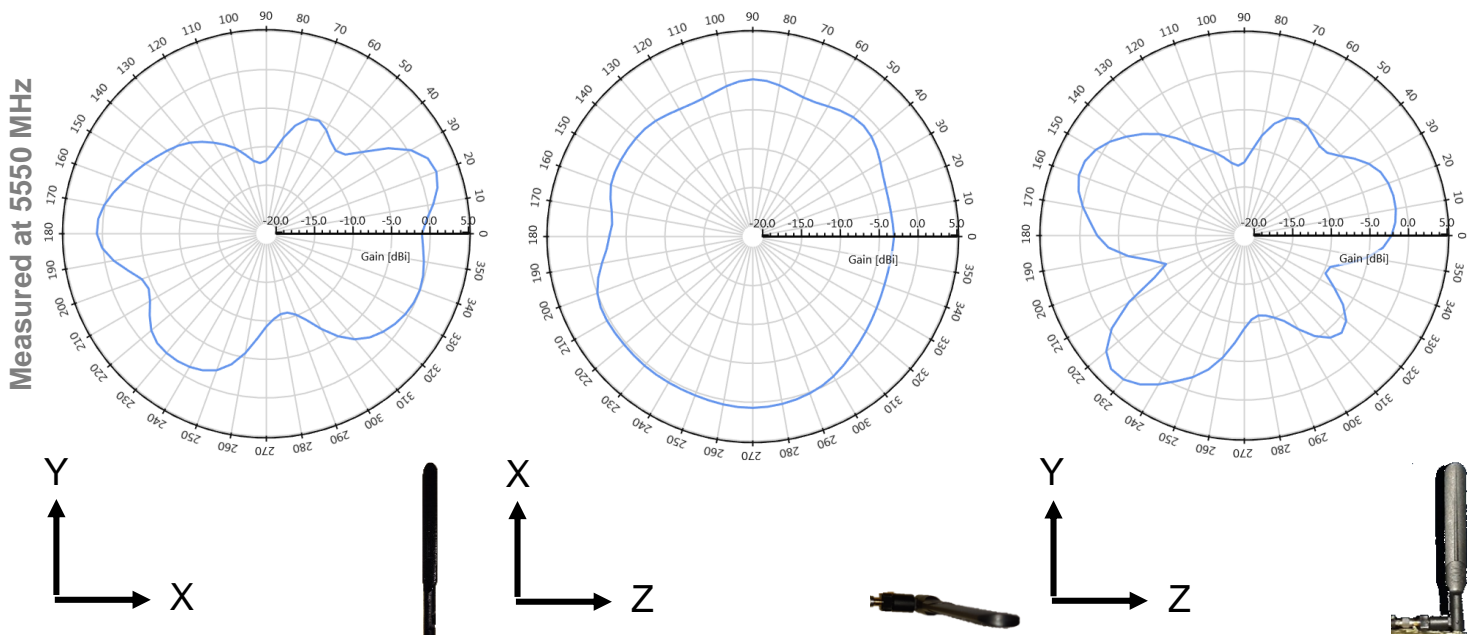
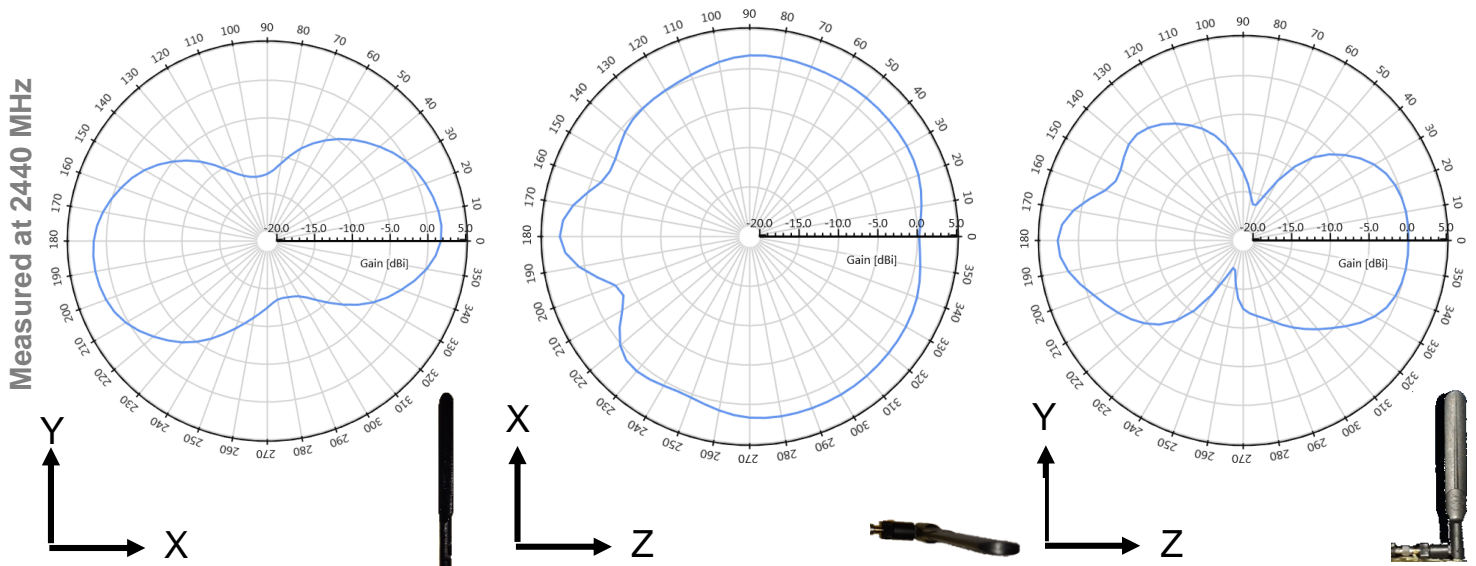




2.4 / 5 GHz External Hinged Wi-Fi antenna specifications  
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Radiation Patterns Plots

Typical performance, measured in free space, in 90° bent position  
Measured at 2.440 GHz, 5.550 GHz





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**Mechanical Specifications**

Typical antenna dimensions in mm

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Connector
X9000294-W3DSMB	157.50 ±3.00	17.60 ± 0.20	127.00 ± 2.00	5.60 ± 0.10	116.00 ± 0.20	RP-SMA Male

