

1. Features

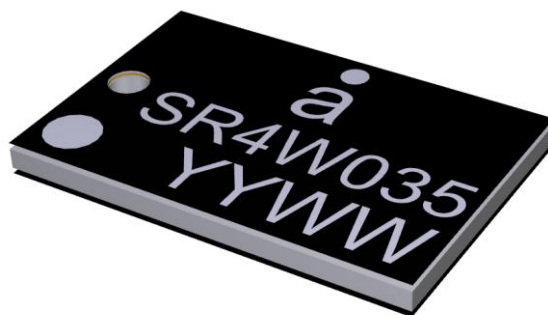
- Antenna for 2.4GHz applications
- Bluetooth, Wi-Fi, ZigBee, ISM.
- Maintains high performance on device: DFI (Designed for Integration)
- Ultra-low profile innovative design.
- SMD mounting
- Supplied on Tape and Reel
- Automotive temperature rating.

2. Description

Serica is intended for use with 2.4GHz applications. The antenna only requires a small ground plane. It is ideal for single and MIMO antenna systems. This product specification shows the performance of the antenna over the frequency range 2.4 – 2.5GHz.

3. Applications

- Wearable devices
- Medical equipment
- Tablets
- Network Devices
- MIMO Systems
- IP Cameras
- Access Points



4. Part Number

Serica: SR4W035



5. General Data

Product name	Serica
Part Number	SR4W035
Frequency	2.4 – 2.5 (GHz)
Polarization	Linear
Operating temperature	-40°C to 140°C
Environmental Condition Test	ISO16750-4 5.1.1.1/5.1.2.1/5.3.2
Impedance with matching	50 Ω
Weight	<1g
Antenna type	SMD
Dimensions	6.0 x 4.0 x 0.4 (mm)

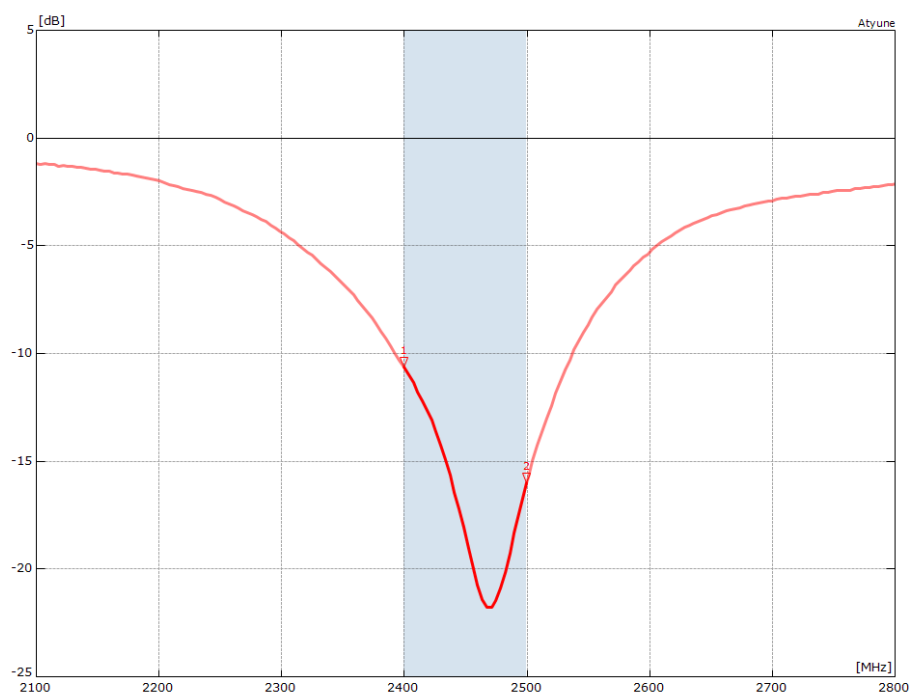
6. RF Characteristics

	2400 - 2500 MHz	Conditions
Peak gain	3.50dBi	All data measured on Antenna's evaluation PCB Part No. SR4W035-EVB-1
Average gain (Linear)	-1.50dBi	
Average efficiency	>65%	
Maximum return loss	-10.0dB	
Maximum VSWR	1.85:1	

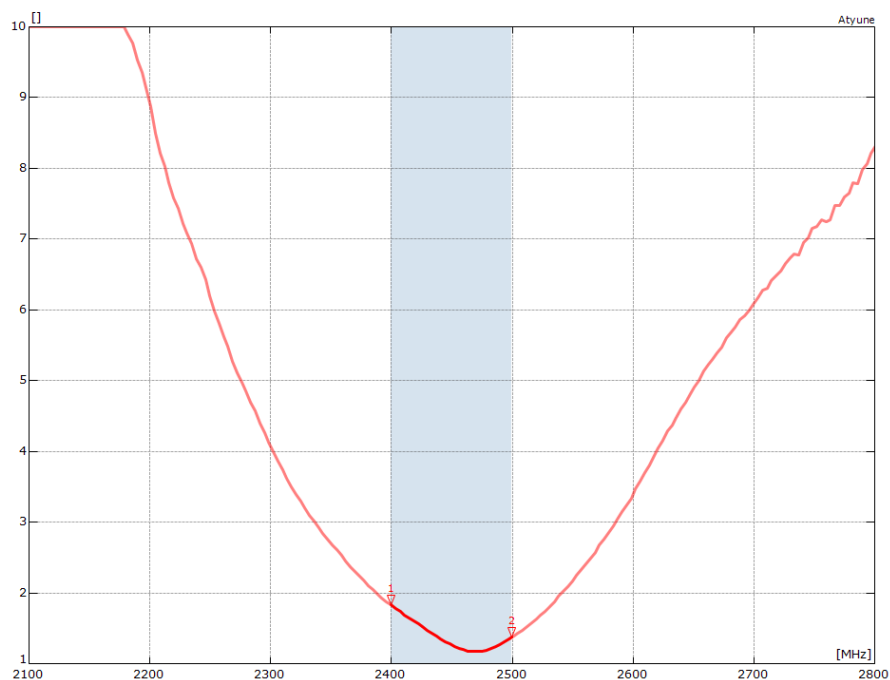
Antennas for Wireless Applications

7. RF Performance

7.1 Return Loss



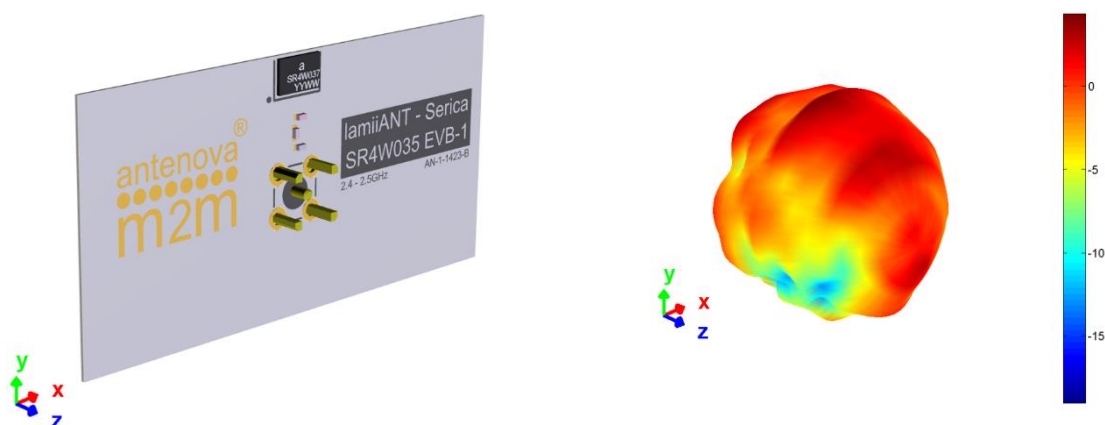
7.2 VSWR



Antennas for Wireless Applications

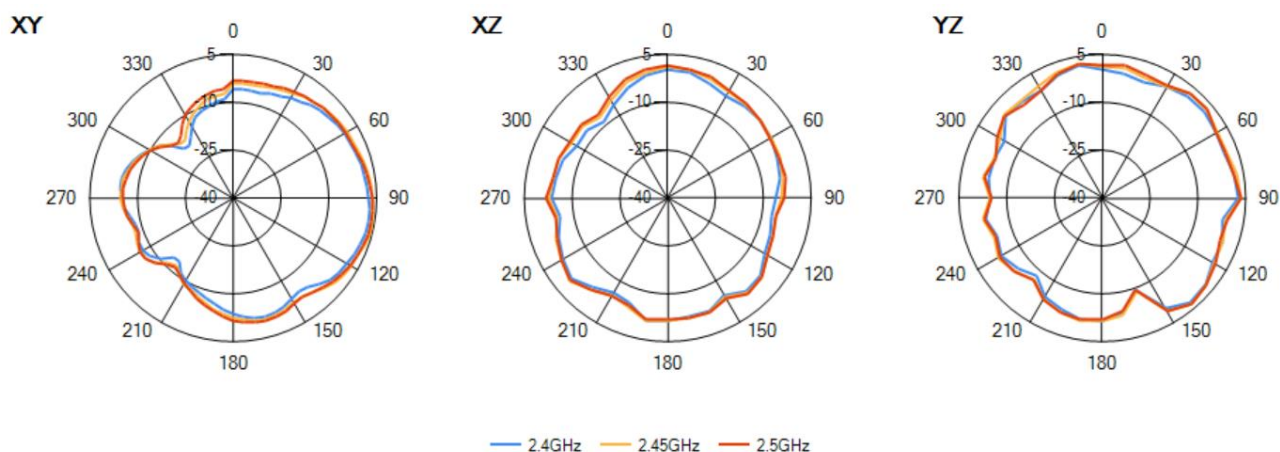
7.3 Antenna pattern

2400 MHz – 2500 MHz



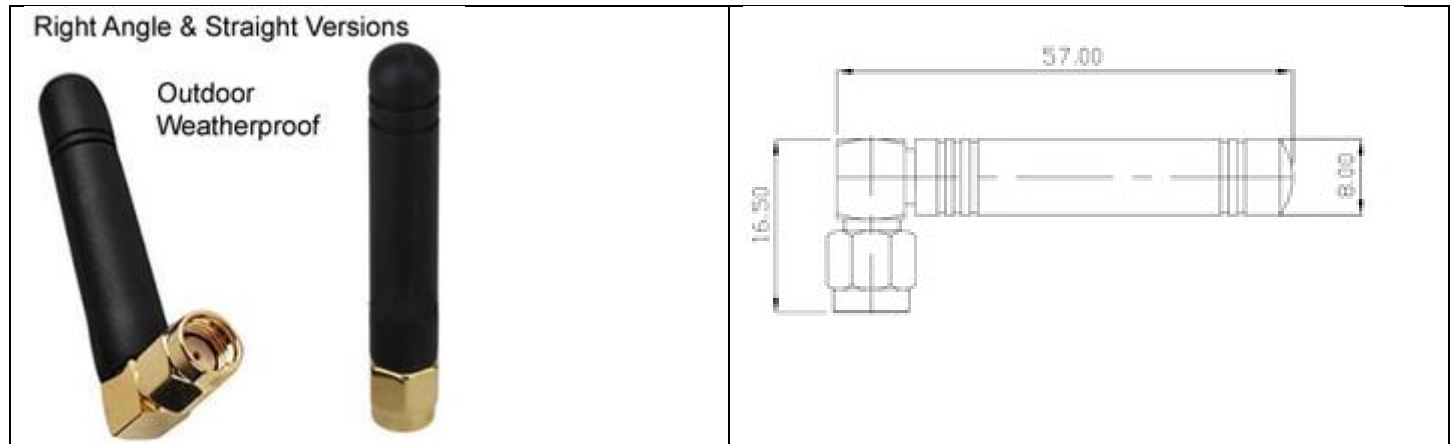
3D pattern at 2.45 GHz

*Drag to rotate pattern and PCB by using Adobe Reader
(Click to Activate)*



Antenna: 2400~2483.5 MHz 2dBi with Right Angle to RP-SMA-male

Data Alliance SKU: A2D2RA



Data Alliance part# A2D2RA		Specifications
Antenna	Frequency Range	2400~2483.5MHz
	Band Width	83.5MHz
	Polarization	Linear
	Gain	2dBi
	V.S.W.R	<2.0
	Impedance	50 Ω
	Connector	RP-SMA Male or others
Environmental	Operating Temperature	-40℃~+85℃
	Vibration	10 to 55Hz with 1.5mm amplitude 2hours
	Environmentally Friendly	ROHS Compliant

Antenna Omni Directional w/ RP-SMA-male or SMA-male

Weatherproofed antenna for outdoor applications: All options on this page are waterproof / weatherproof.

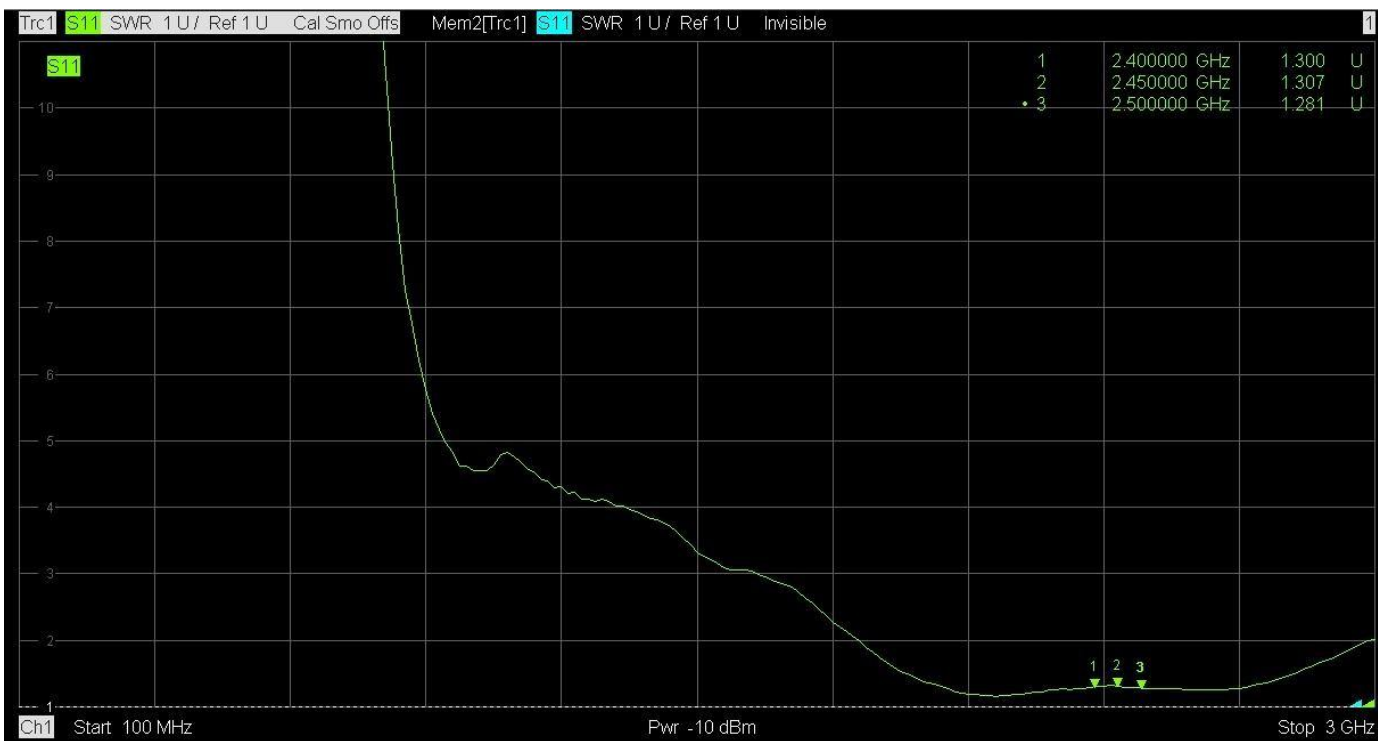
- Bottom section of **antenna**: We have two options: Fixed-straight and 90-degree right-angled bottom section.
- 2dBi **omni directional** radiates WiFi / wireless signal to high & low elevations in local area



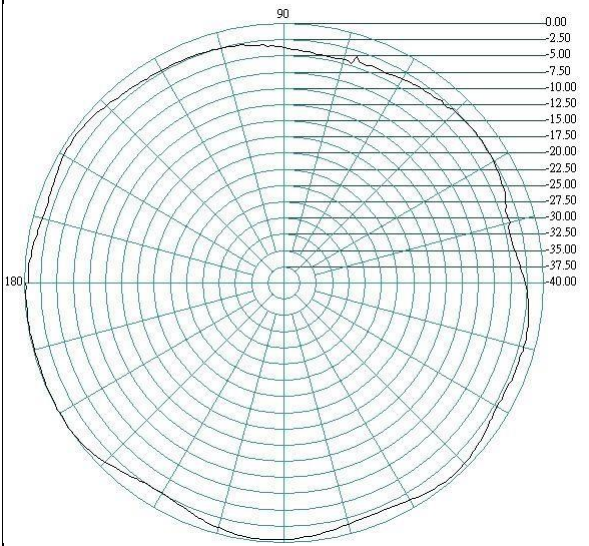
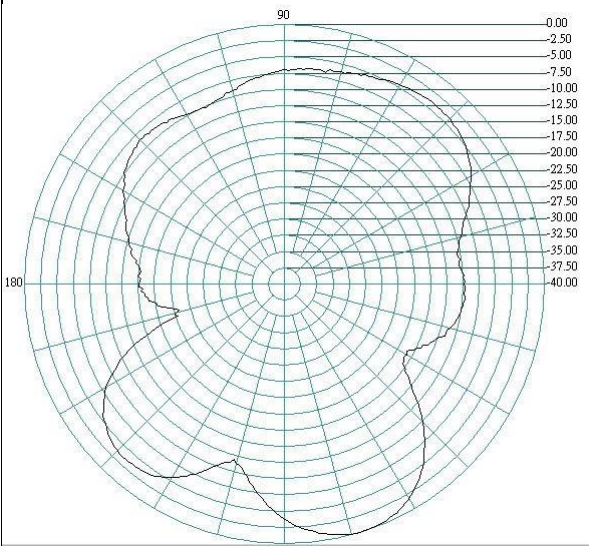
Compatible with [Wireless Access Points](#) & other wireless devices that have [RP-SMA antenna jacks](#) **Omni antenna**: Radiates signal with a beam of 360 degrees; also receives signal from 360 degrees around it. This type of [omni-directional antenna](#) is called a [dipole antenna](#), sometimes called "rubber duck" [antenna](#). **Compatibility with wireless standards & applications**: This [omni directional antenna's](#) range of frequency band compatibility in the [2.4 ~ 2.5GHz frequency band range](#), its [low broadband VSWR](#), and [impedance matching to 50 Ohm gear](#), makes it **suitable and compliant for all the following applications**:

- [IoT wireless](#) & [M2M](#): [Bluetooth](#), [ZigBee](#), and [ISM](#). Since it is [vertically polarized](#), it is compatible with many machine to machine communication applications, remote monitoring, and telemetry applications.
- [2.4GHz](#) WiFi applications: [802.11N](#), [802.11G](#), [802.11B](#)
- **As client antenna**: Connect to access points in any direction. Portable size: Easily fits in laptop case
- **As [access point antenna](#)**: Provides signal to clients in all directions (360-degree horizontal [beamwidth](#))
- **[Mounts](#) directly onto [RP-SMA \(female\) connector](#)** of [access point](#), [wireless bridge](#), or client.

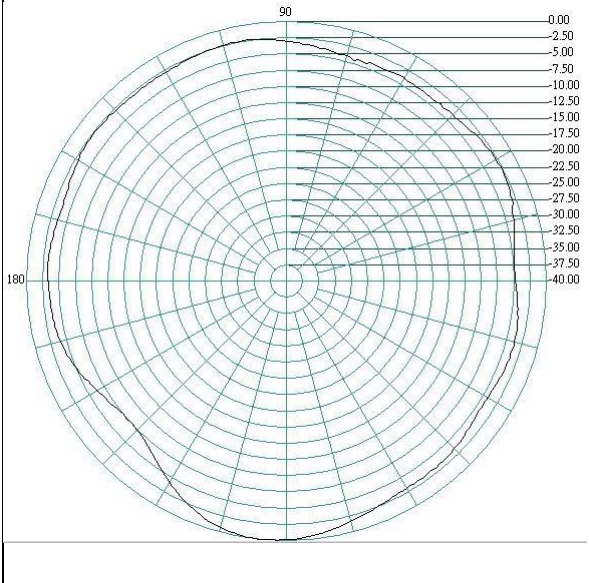
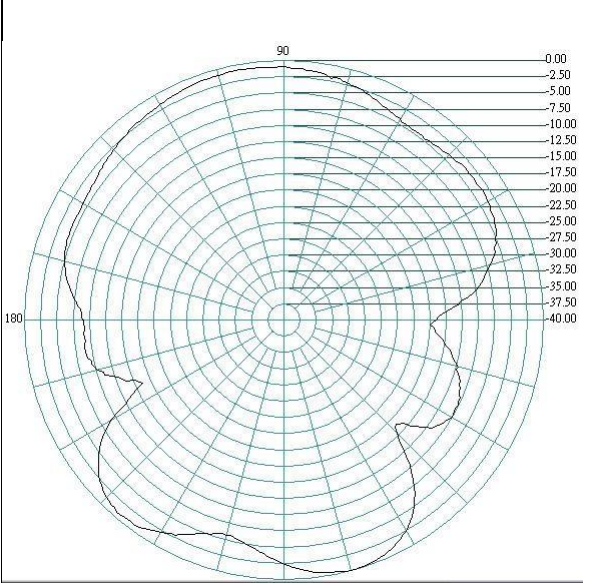




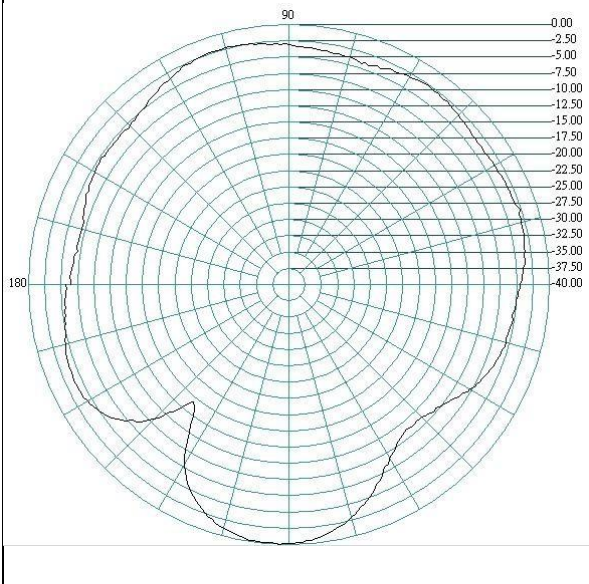
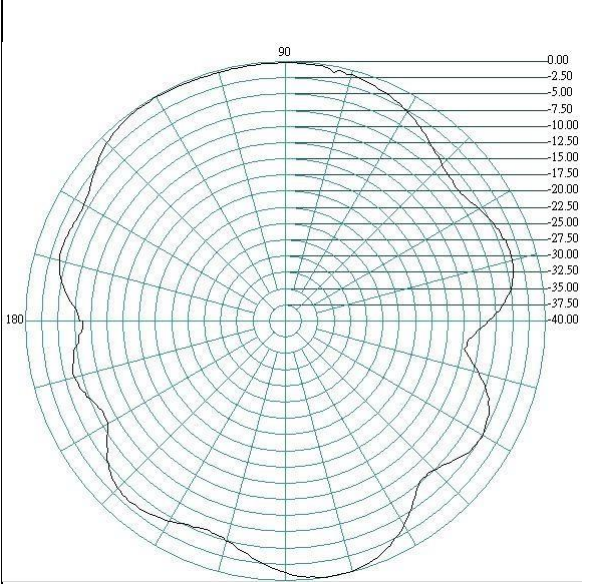
RADIATION PATTERNS



2.45GHz



2.5GHz





Home / Waterproof / Weatherproof / Antennas: WeatherProof & Marine

Antenna Dual Band Directional Weatherproof 2.4GHz 3dBi & 5.1-5.8GHz 5dBi w/Screw Mount. Cable to RP-SMA

Price: \$8.50

SKU: A25P5

Brand: Data Alliance

Availability: In stock

Weight: 0.20 LBS



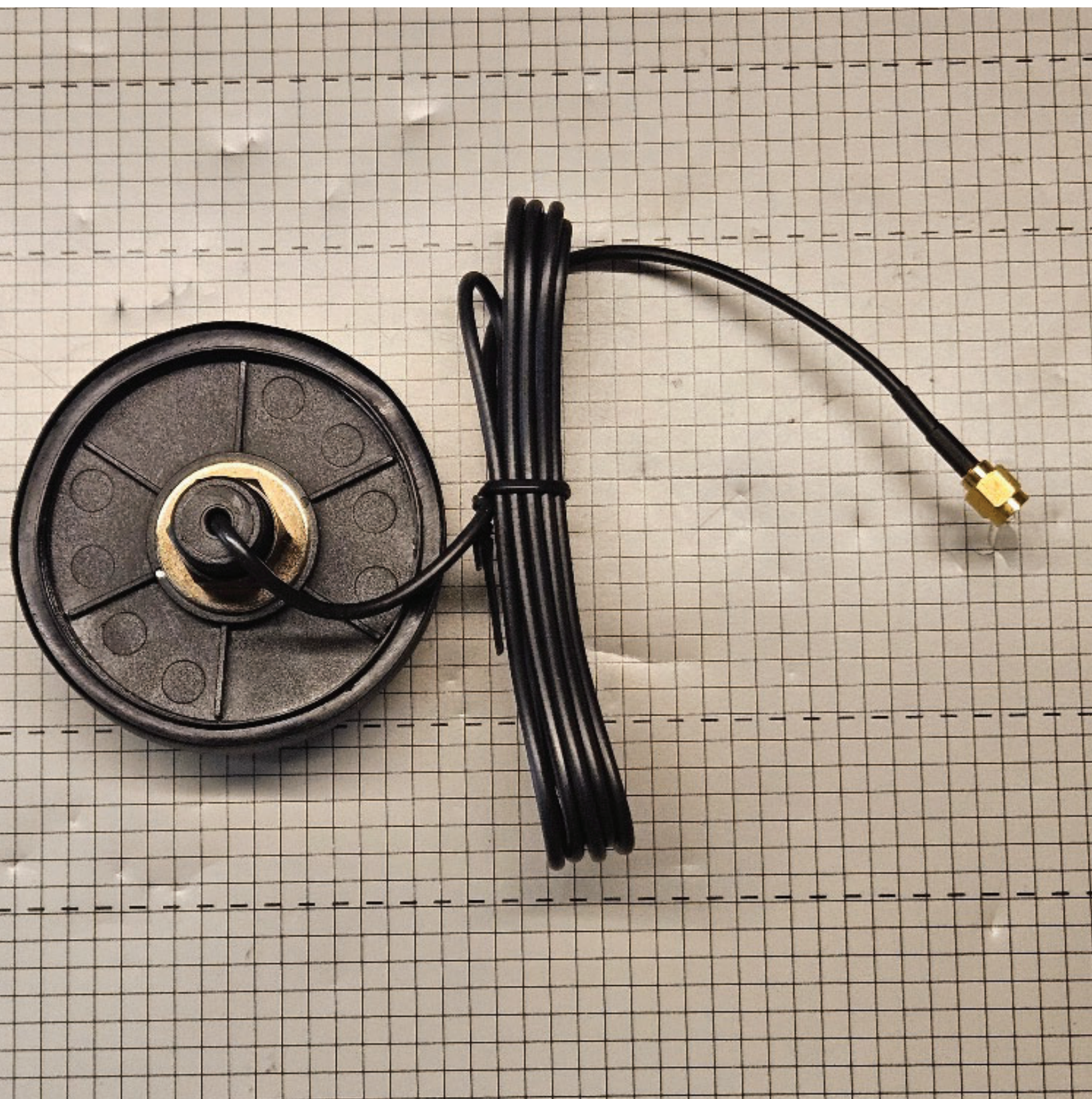
***Color::**

Black

White

***Cable length:**





communication applications, remote monitoring, and telemetry applications.

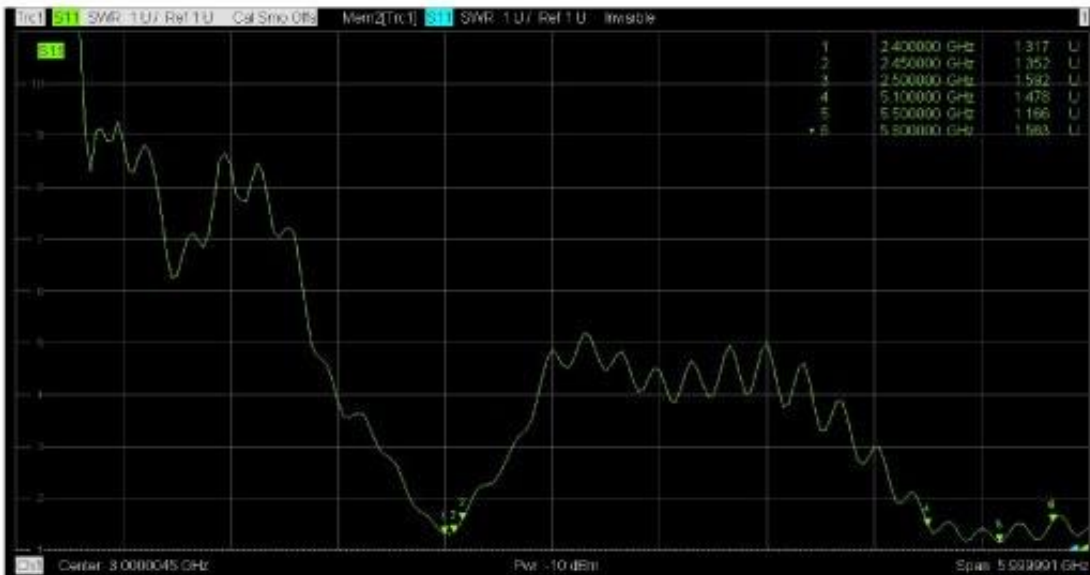
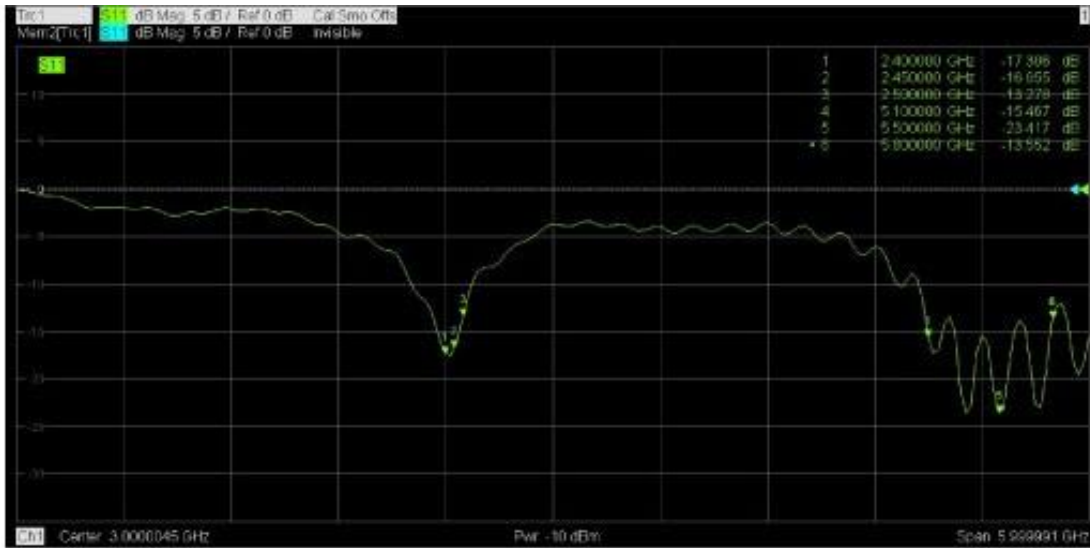
- **As access point antenna:** Provides signal to clients in any direction (360-degree horizontal beamwidth)
- **As client antenna:** Connect to an access point in any direction.
- Designed for wireless 802.11ac and other Dual Band 2.4GHz / 5.8 GHz applications

Specifications:

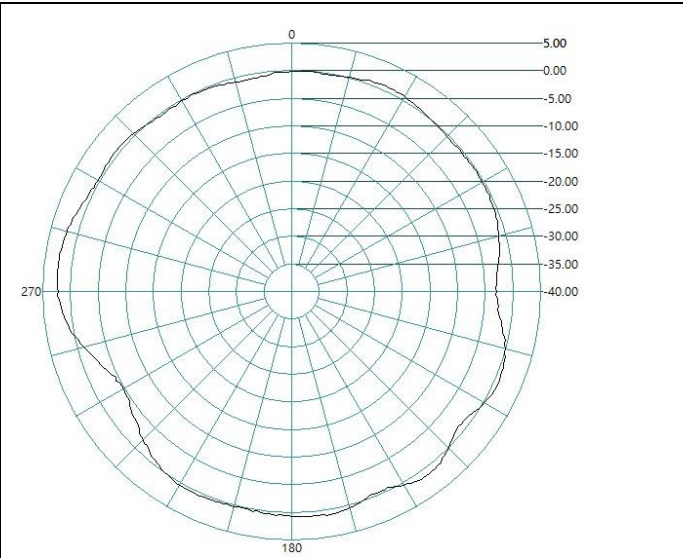
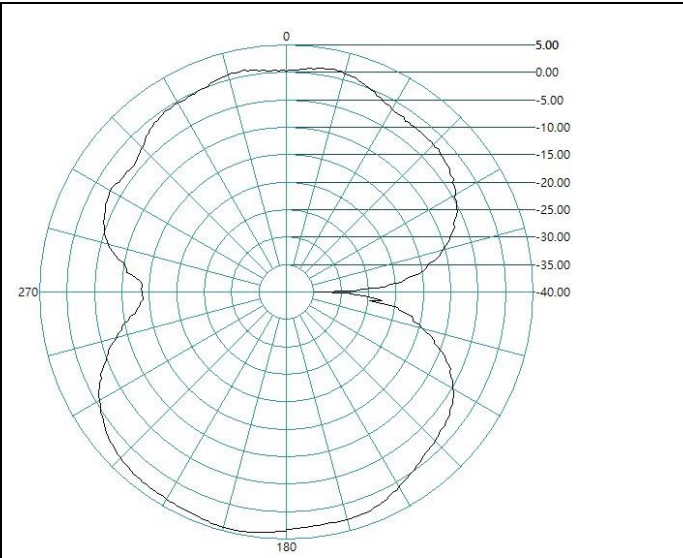
Frequency:	2400-2500MHz and 5100-5900MHz (2.4 - 2.5GHz and 5.1 to 5.9GHz)
<u>Gain:</u>	5 dBi in the 5.1 - 5.9GHz band and 3dBi in the 2.4GHz to 2.5GHz band
Color:	Black or White
<u>Antenna's Cable:</u>	Length 1-FT (30CM). LMR-100A. We can provide w/longer cable: Please contact customer service (for special order).
<u>Connector:</u>	<u>RP-SMA-male</u> (we can provide other connector options for bulk orders)
<u>VSWR</u>	<= 1.7
<u>Polarization:</u>	Linear Vertical
Temperature:	-40 to +85 °C
Humidity:	40% to 95%
Waterproof:	Totally sealed IP67 casing, with rubber seal gasket to prevent risk of water ingress.

- **Dimensions:**
 - Largest diameter: 78mm
 - Smallest diameter of antenna body: 63mm
 - Depth (or height): 23mm.
 - Diameter of through-hole mount: 11/16 inch (17mm) including outer part of threads.
- Directional: Radiates and receives signal primarily in the direction in which the antenna is pointed. This helps eliminate signal noise, which enables stronger and better signal quality in the desired direction.
- ROHS & REACH compliant: Antenna and connector are all compliant with ROHS 3 and REACH.
- We also have a 2.4GHz version, a dual-band version (2.4 & 5GHz), a 5GHz version, and a 433MHz version.

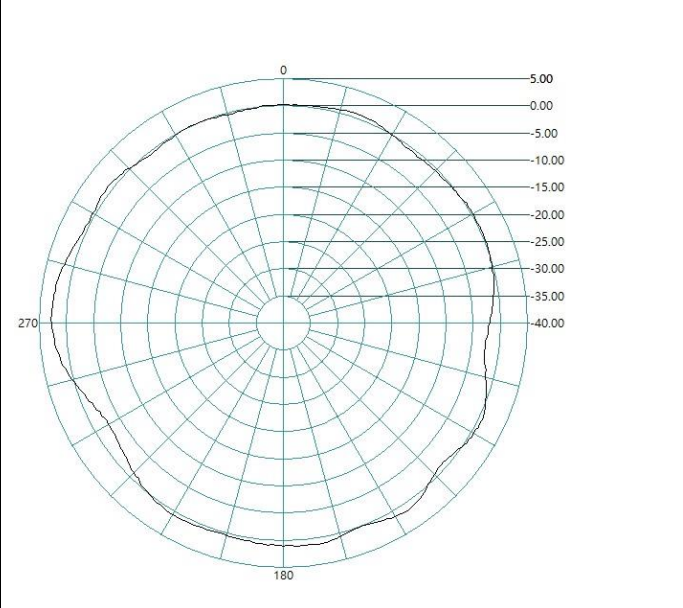
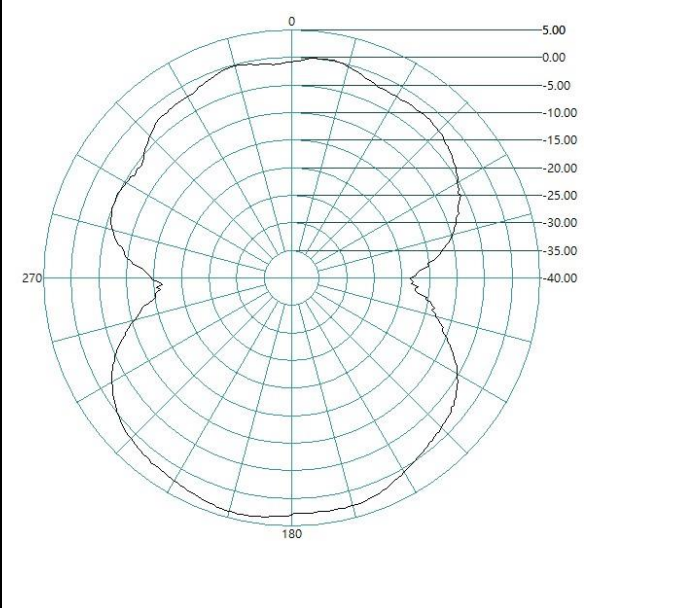
TEST RESULTS



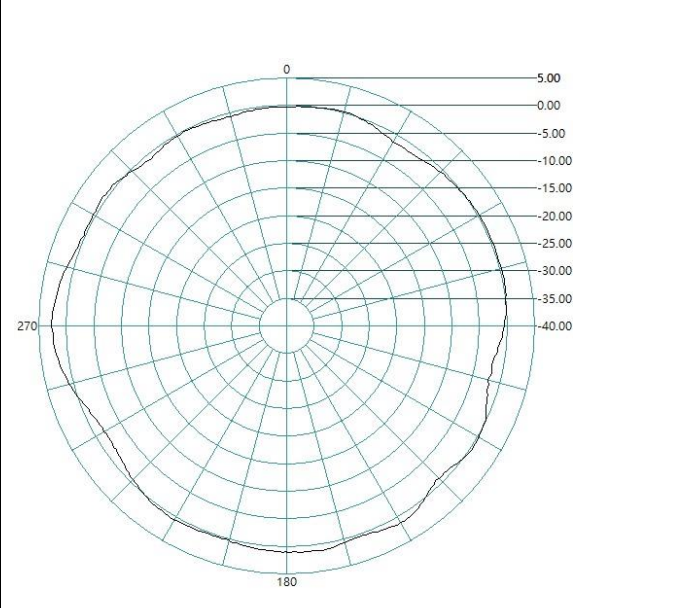
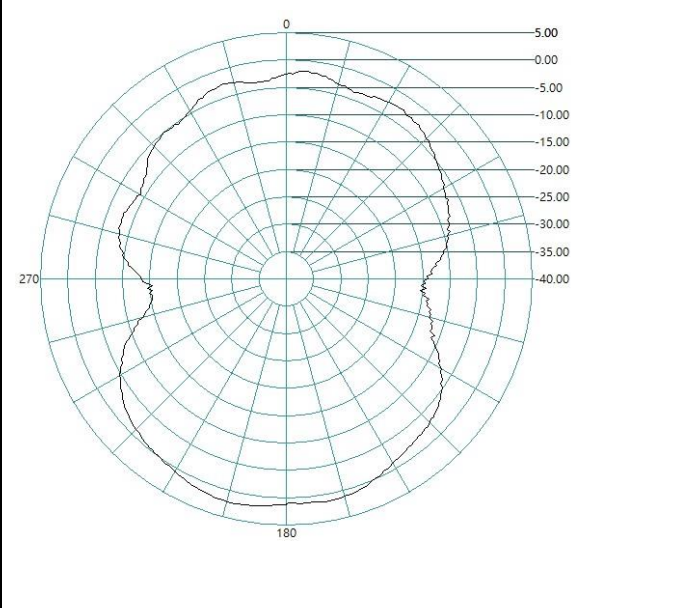
Part# A25P5 RADIATION PATTERNS



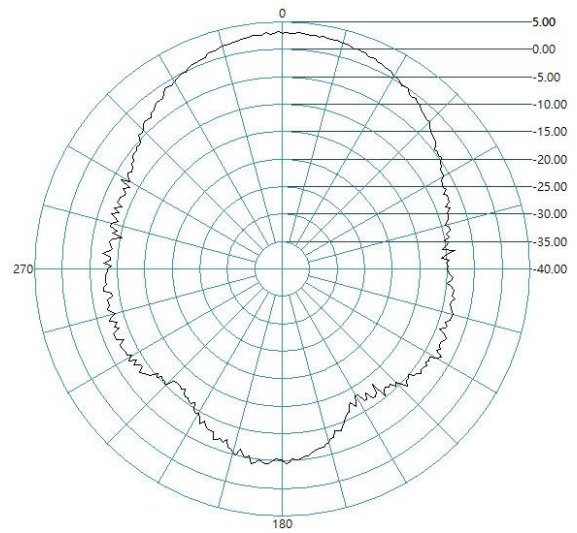
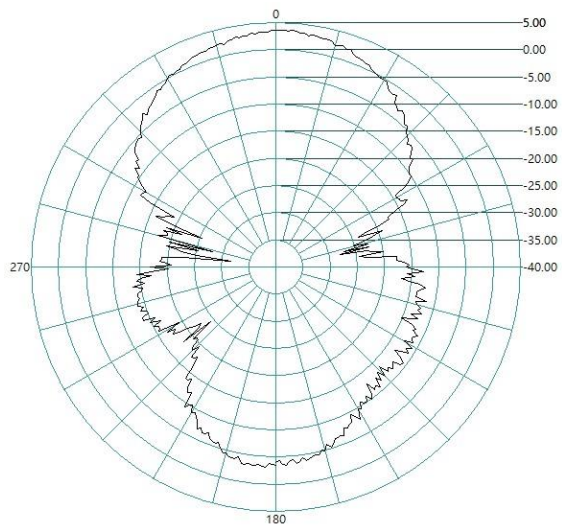
2.45GHz



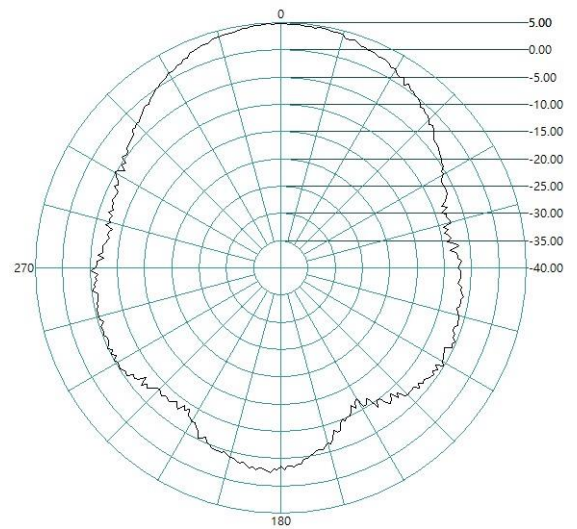
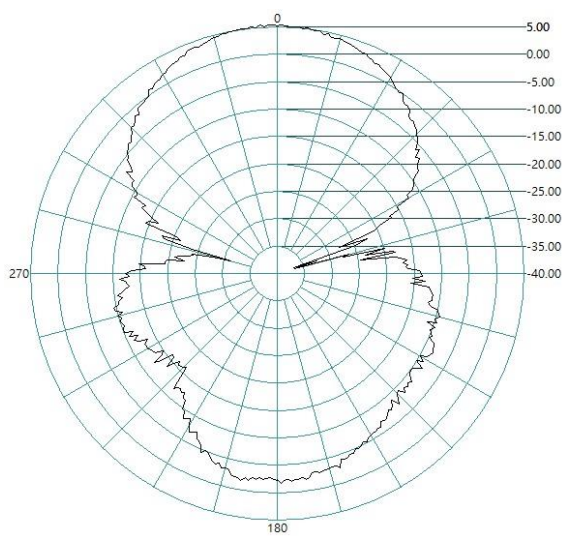
2.5GHz



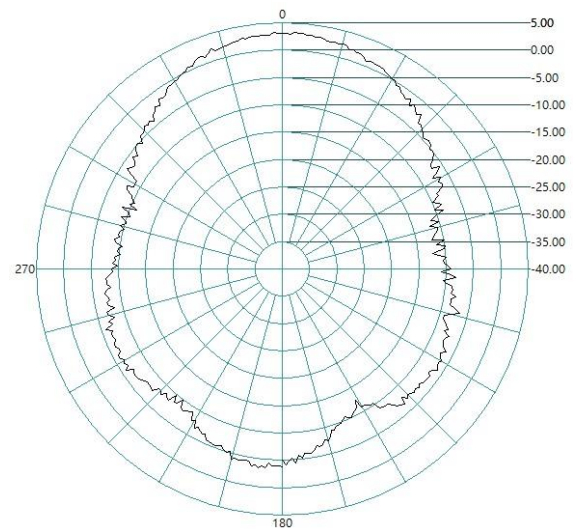
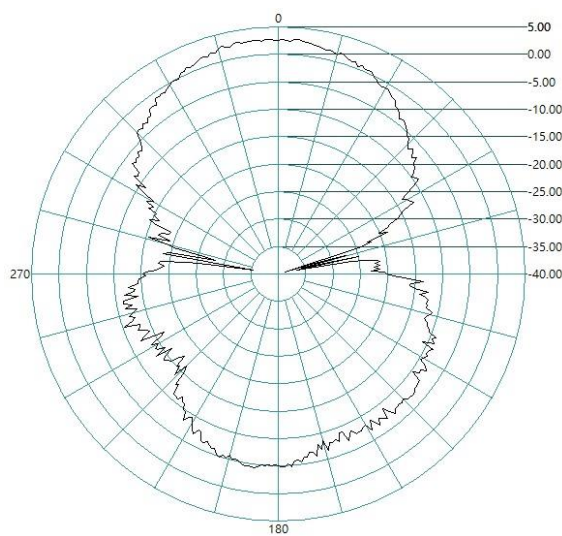
5.1GHz



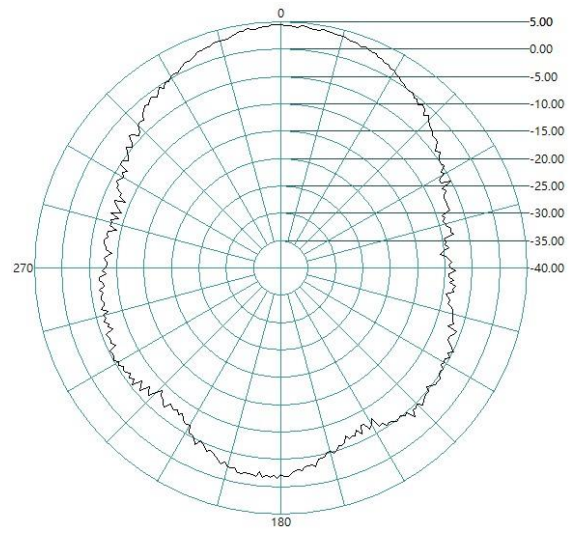
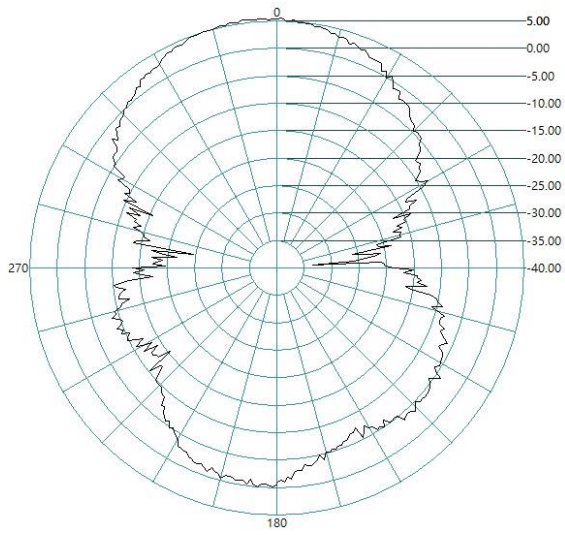
5.3GHz



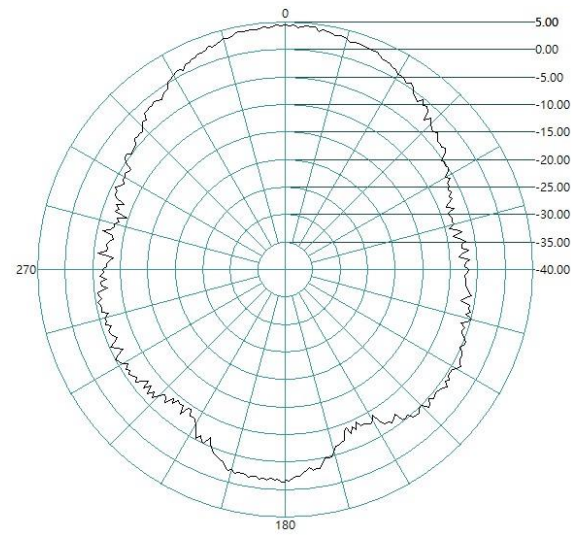
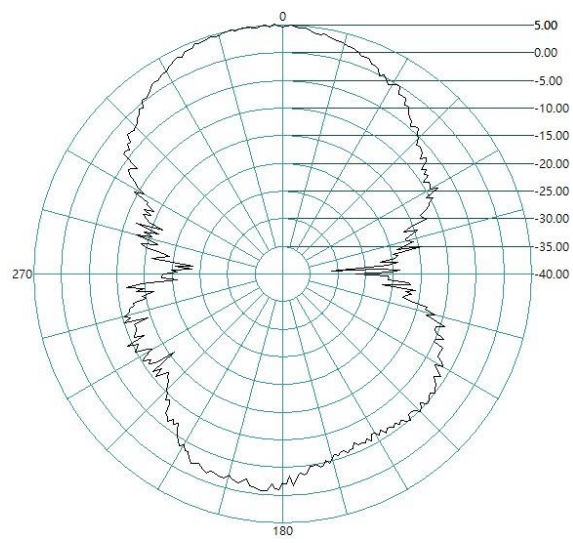
5.5GHz



5.7GHz



5.8GHz





Home / Antennas / Antennas By Connector Type / Antennas with SMA Connector

Antenna Dual Band 5dBi 2.4GHz 5.8GHz WiFi Omni-Directional. RP-SMA or SMA

Price: \$2.75

SKU: ADO5RPSMA

Brand: Data Alliance

Availability: In stock

Weight: 0.22 LBS

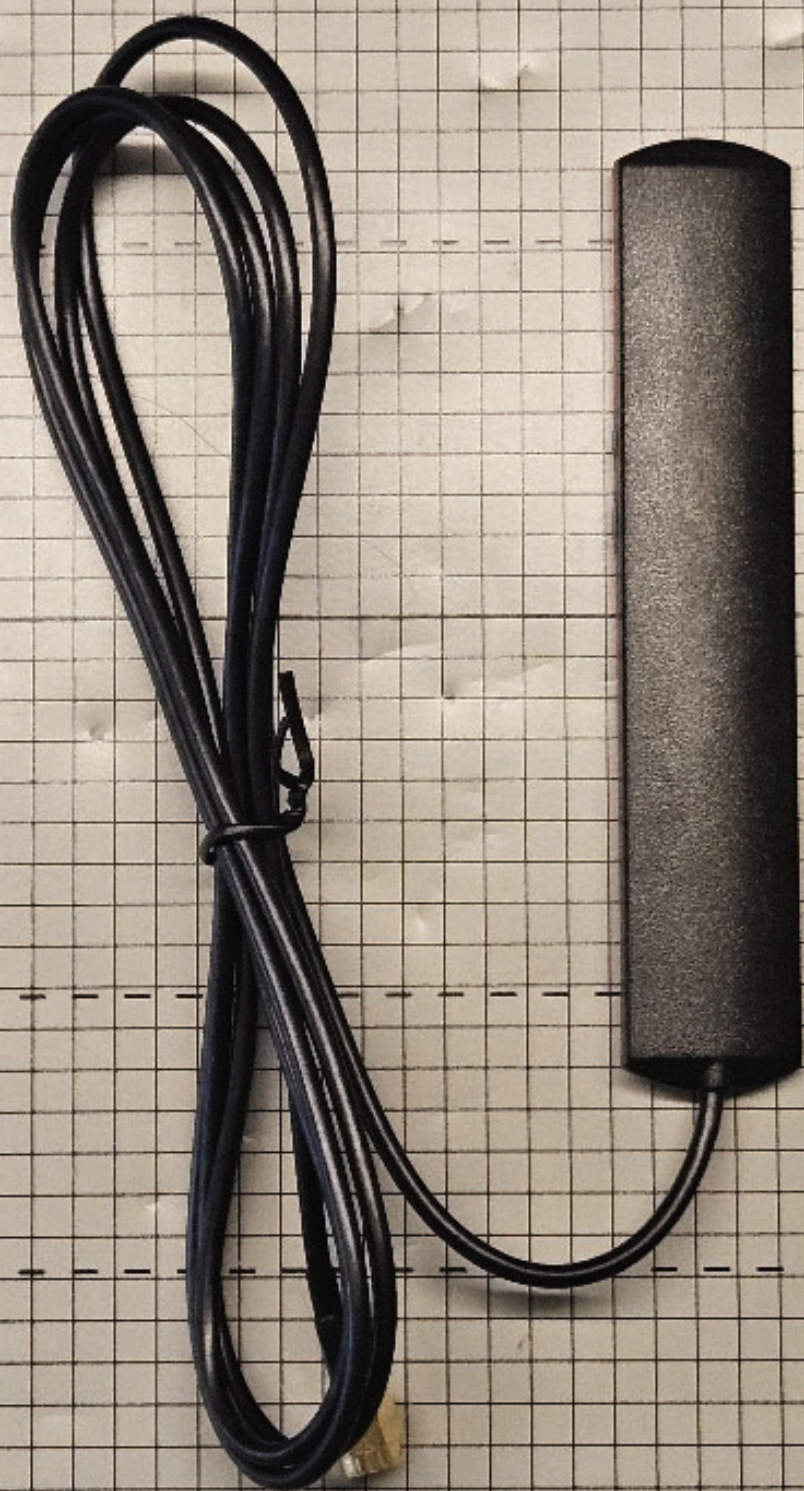


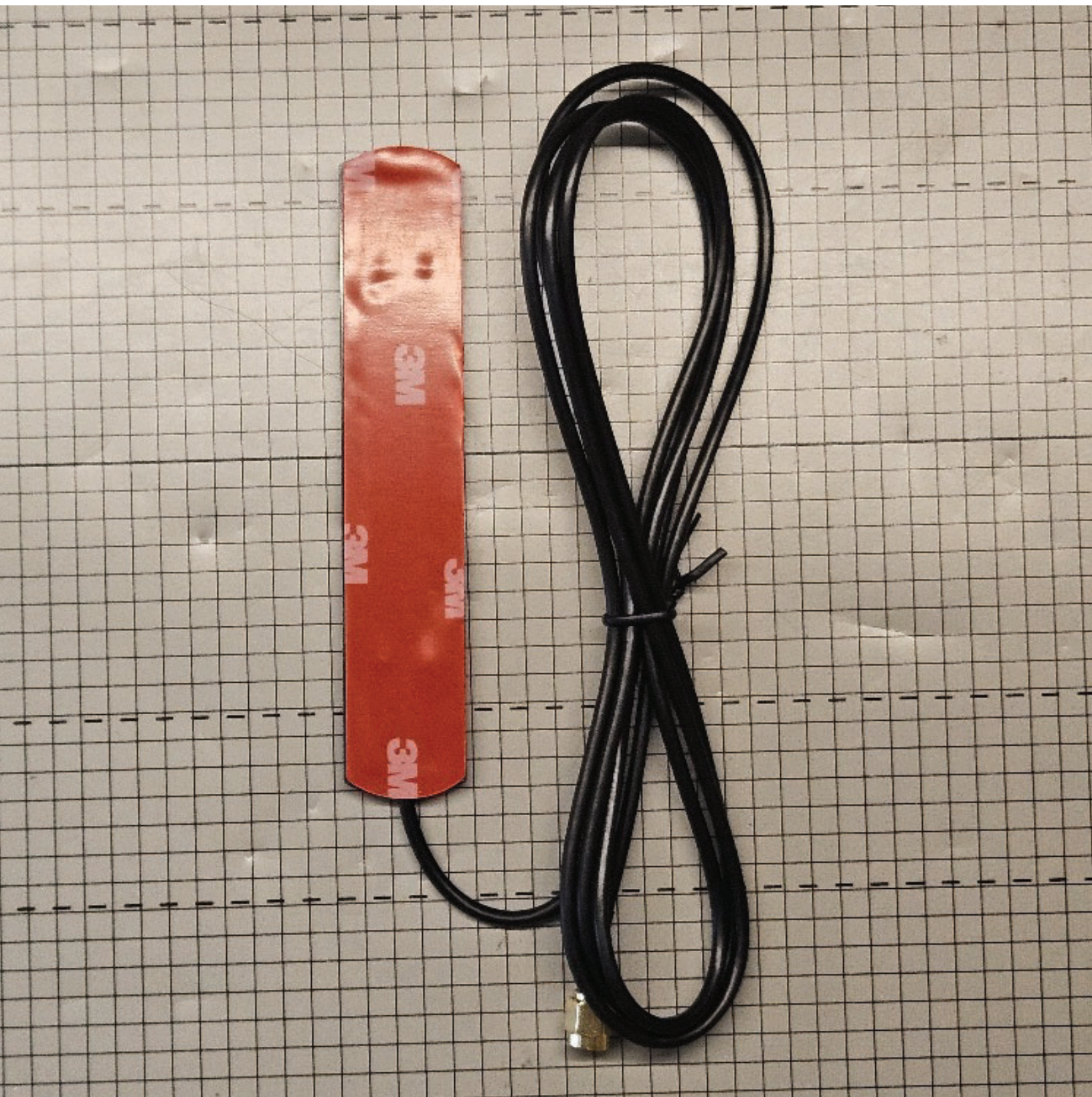
***RP-SMA or SMA connector:**

- ☒ RP-SMA male
☐ SMA male

Quantity:

1





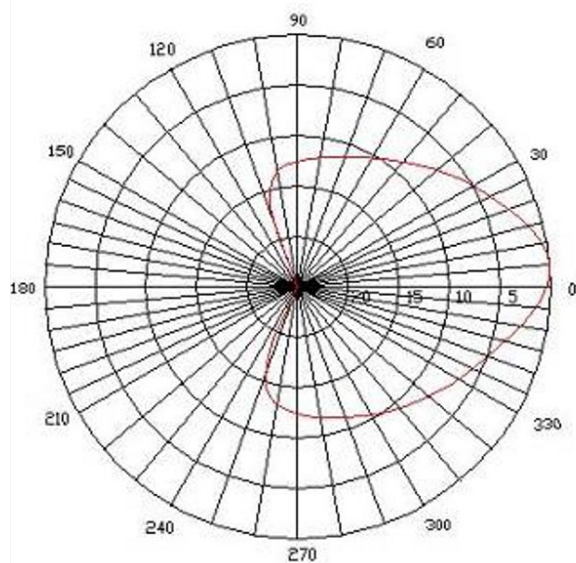


Compatibility with wireless standards & applications: This omni directional antenna's range of frequency band compatibility in the 2.4 ~ 2.5GHz frequency band range, its excellent low broadband VSWR at < 1.6, and impedance matching to 50 Ohm gear, makes it suitable and compliant for all the following applications:

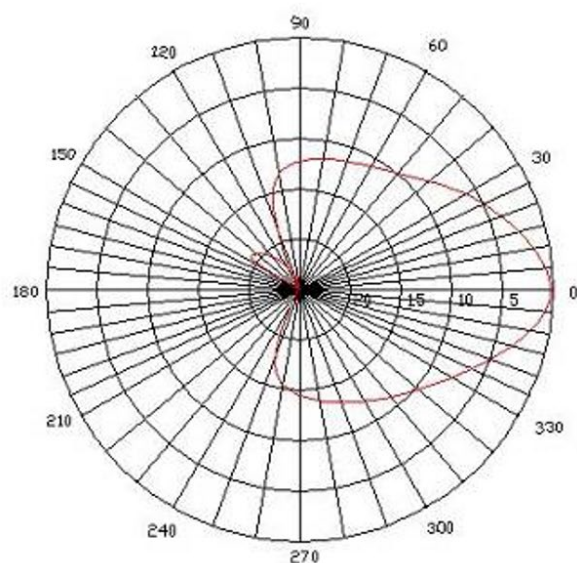
- All WiFi standards: 2.4GHz and 5GHz applications: 802.11AC, 802.11N, 802.11G, 802.11B, 802.11A
- IoT wireless & M2M: Bluetooth, ZigBee, and ISM. Since it is vertically polarized, it is compatible with many machine to machine communication applications, remote monitoring, and telemetry applications.
- **As access point antenna:** Provides signal to clients in any direction (360-degree horizontal beamwidth)
- **As client antenna:** Connect to an access point in any direction
- Designed for wireless 802.11ac and other Dual Band 2.4GHz / 5.8 GHz applications
- Capable of extending your wireless range up to 300 meters.
- Adhesive Mount is included for wall or pole mounting.
- Suitable for outdoor or indoor wireless gear with RP-SMA-female or SMA-female connector.

SPECIFICATIONS	
<u>Frequency range</u>	<u>2.4GHz 5.8GHz Dual Band</u>
<u>Gain (dBi)</u>	5dBi
<u>VSWR</u>	<1.8 : Low VSWR indicative of high performance
<u>Impedance</u>	50 Ohm
<u>Polarization</u>	Vertical
HPBW / horizontal	360 degrees (horiz. pol. beamwidth)
HPBW / vertical	25 degrees (vertical pol. beamwidth)
<u>Max Power handling</u>	50W
<u>Antenna Cable</u>	<u>RG-174 coax cable</u> to RP-SMA or RP-SMA connector
<u>Antenna Connector</u>	<u>RP-SMA-male</u> & SMA-male options
Survival wind speed	180Km/hr
Temperature	-40C ~+ 60C
Humidity	100% @25c
Radome color	Black
Radome material	Hard plastic
Weight+Packing Weight	57g (2oz)
Dimensions	Inches: L 4.5 X W 7/8 X 1/8

ROHS 3 & REACH compliant: Antenna, cable and connector are all compliant with ROHS 3 and REACH.



Horizontal Pattern



Vertical Pattern

