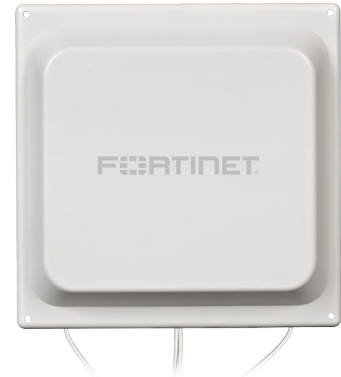


DATA SHEET

# Fortinet Antennas

High-performing Indoor/Outdoor Antennas



Please note, this datasheet covers Fortinet’s legacy antenna portfolio. For our new antenna portfolio please see: <https://www.fortinet.com/content/dam/fortinet/assets/data-sheets/fortinet-antennas.pdf>.

## Product Offerings

MODEL	ANTENNA TYPE	APPLICATION
FAN-612R	Sector/Patch	Outdoor
FAN-612N	Sector/Patch	Outdoor
FAN-614R	Sector/Patch	Indoor
FAN-664R	Sector/Patch	Outdoor
ANT-06ABGN-0607-PT	Sector/Patch	Outdoor
ANT-06ABGN-0606-O	Omnidirectional	Outdoor
ANT-A080-NM-2	Omnidirectional	Outdoor
ANT-BG080-NM	Omnidirectional	Outdoor
ANT-12ABGN-0304-O	Omnidirectional	Indoor/Ceiling

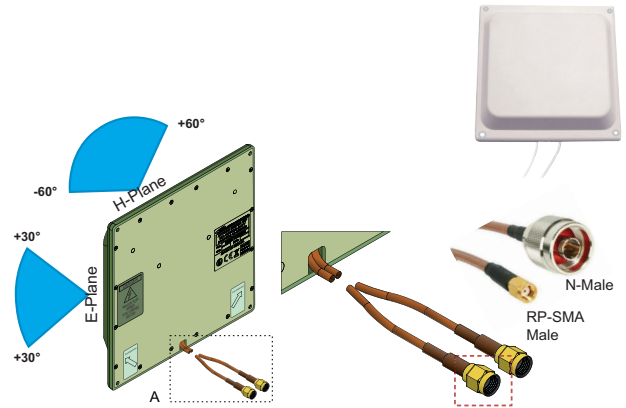


## FEATURE HIGHLIGHTS

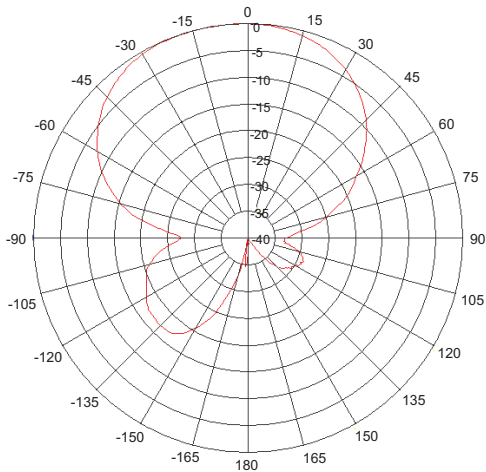
### FortiAntenna 612R and FortiAntenna 612N

#### 120° Sector

FortiAntenna 612R and FortiAntenna 612N are dual-band two-element 120° sector antenna for use in 2x2 MIMO applications. The 612R has RP-SMA connectors, while the 612N has the same antenna characteristics, but offers N-Type connectors. The antenna provides coverage of 2.4–2.5 GHz and 4.9–5.9 GHz in a single antenna radome. The lightweight and durable construction and UV-protected radome made of plastic allow indoor and outdoor installation. This antenna is suitable for coverage of large rectangular areas like shopping centers, courtyards, and hallways.

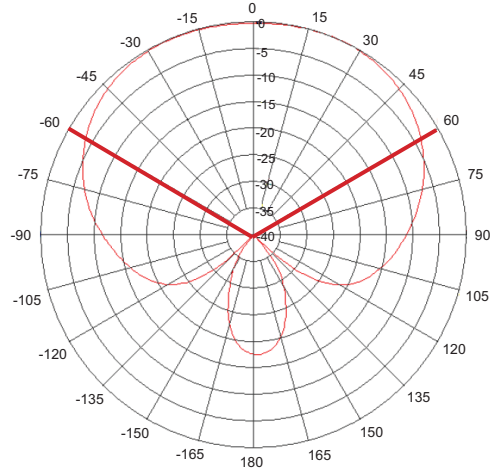


**E-Plane Pattern**

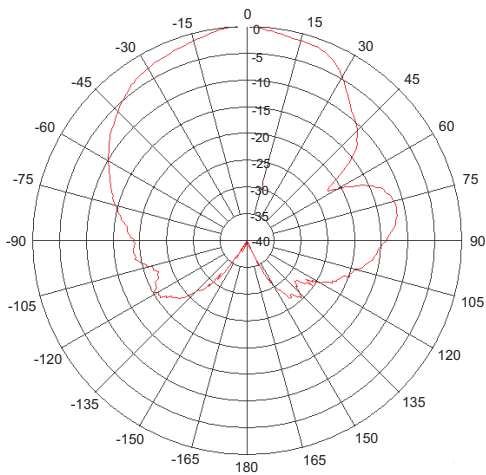


**Frequency  
2500 MHz**

**H-Plane Pattern**

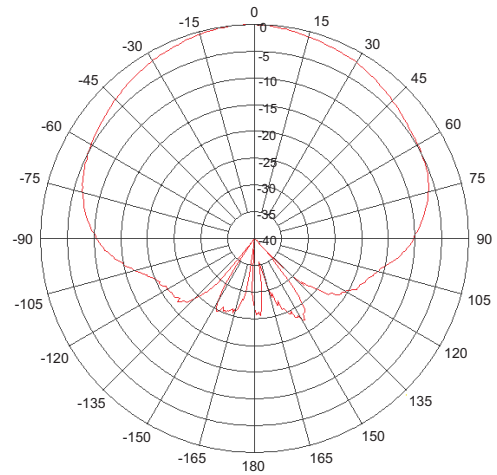


**E-Plane Pattern**



**Frequency  
5500 MHz**

**H-Plane Pattern**



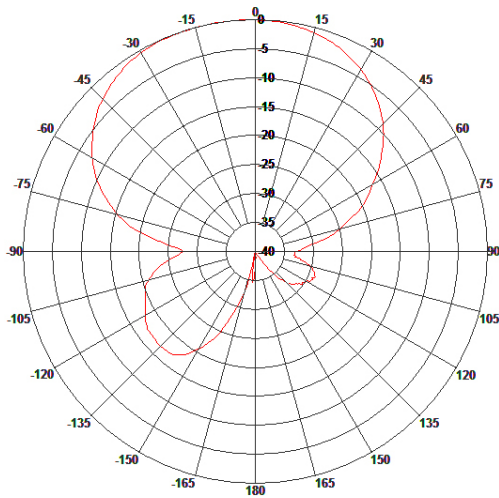
## FEATURE HIGHLIGHTS

### FortiAntenna 614R 120° Sector

FortiAntenna 614R is a sector 120° 5 dBi wall mount indoor 4×4 MIMO sector panel antenna that provides coverage of 2.3–2.7 GHz and 4.9–6.1 GHz in a single antenna radome. This antenna has four RP-SMA connectors attached to 1.2 meter cables.

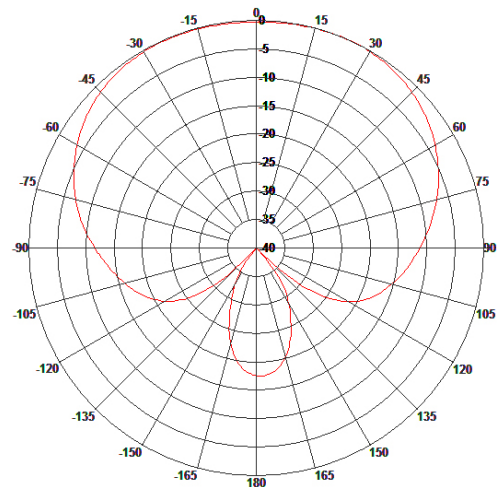


E-Plane Pattern

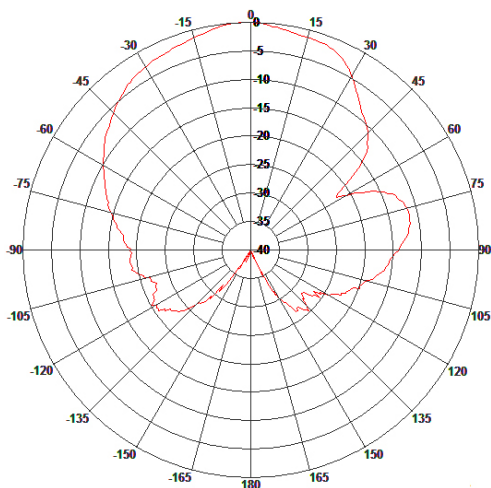


Frequency  
2500 MHz

H-Plane Pattern

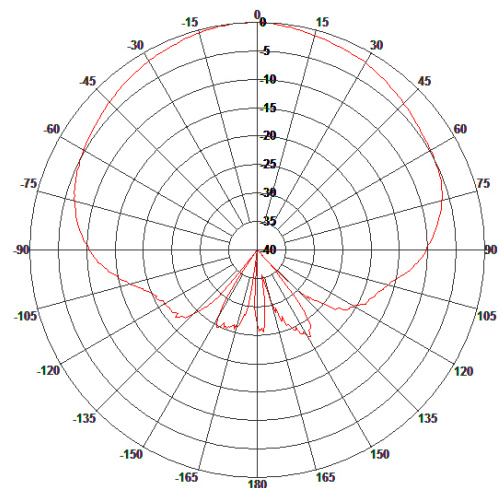


E-Plane Pattern



Frequency  
5500 MHz

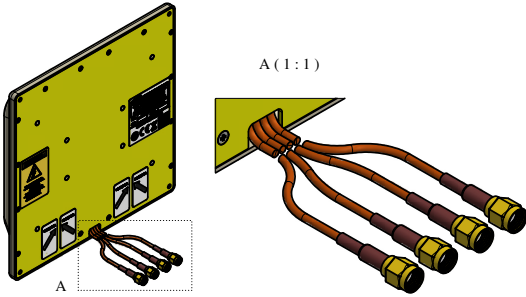
H-Plane Pattern



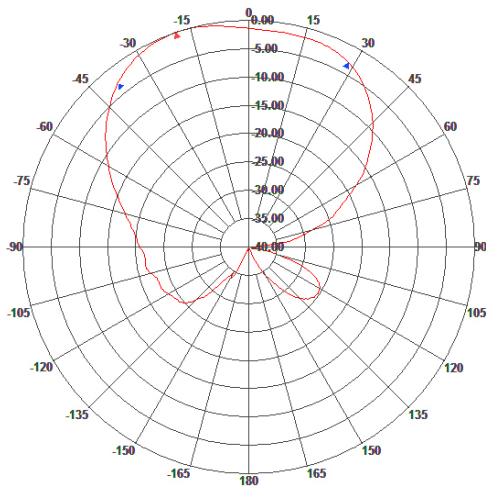
## FEATURE HIGHLIGHTS

### FortiAntenna 664R 60° Sector

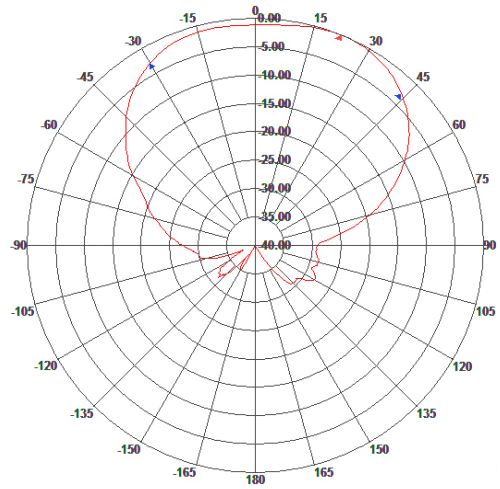
FortiAntenna 664R is a 60° 8 dBi dual-band 4×4 MIMO sector panel antenna with four connectors that provide coverage of 2.4–2.5 GHz and 5.15–5.875 GHz in a single antenna radome. This antenna has four RP-SMA connectors attached to 75 cm cables.



E-Plane Pattern

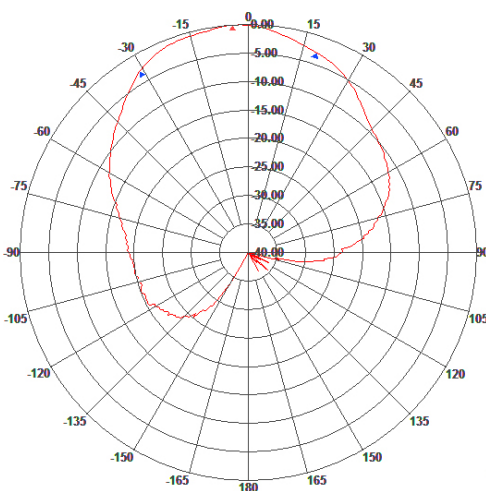


H-Plane Pattern

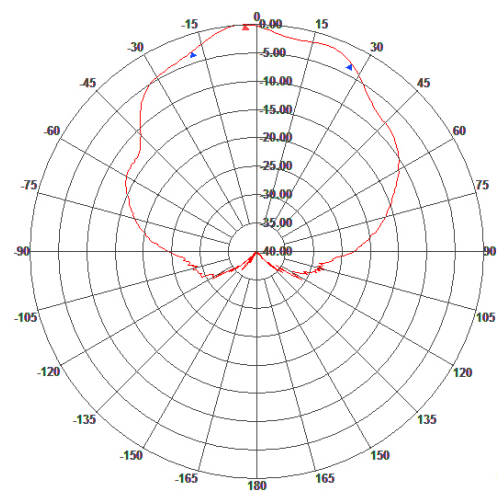


Frequency  
2450 MHz

E-Plane Pattern



H-Plane Pattern



Frequency  
5300 MHz

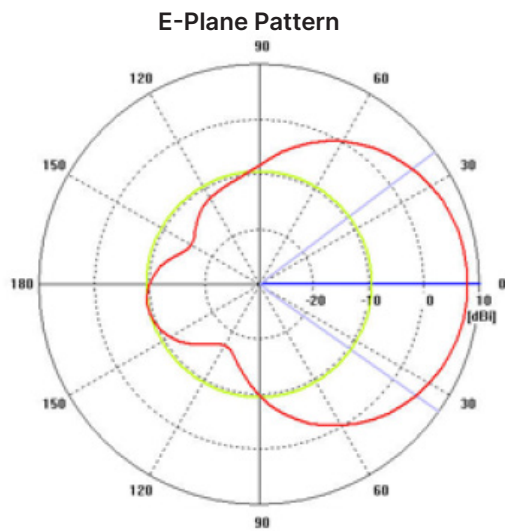


## FEATURE HIGHLIGHTS

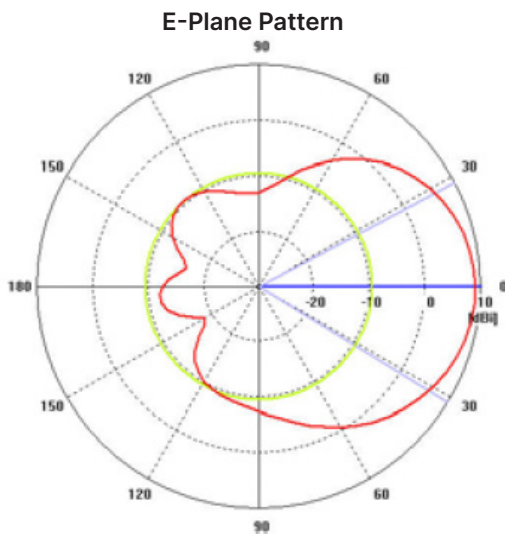
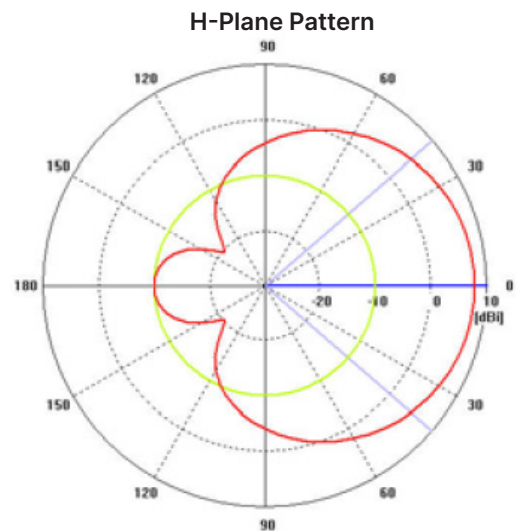
### ANT-O6ABGN-0607-PT

#### Indoor and Outdoor MIMO Patch Antenna

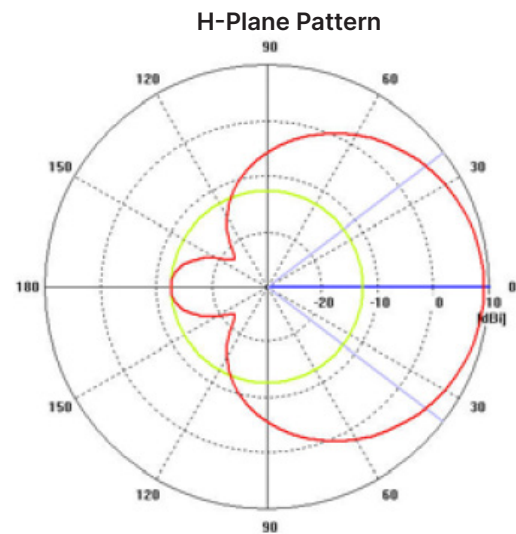
The ANT-O6ABGN-0607-PT is three integrated 2.4 GHz patch antennas and three integrated 5 GHz patch antennas in one enclosure. Housed in a low-profile radome, the antenna can be mounted to a wall or mast, indoors or outdoors. This antenna features six RP-SMA connectors with 36" pigtailed.



Frequency  
2.4 GHz



Frequency  
5 GHz

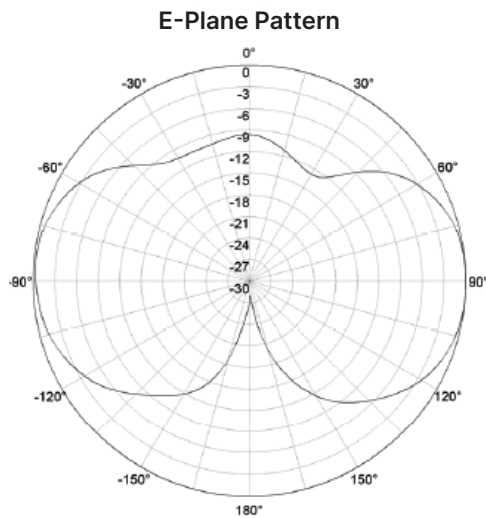
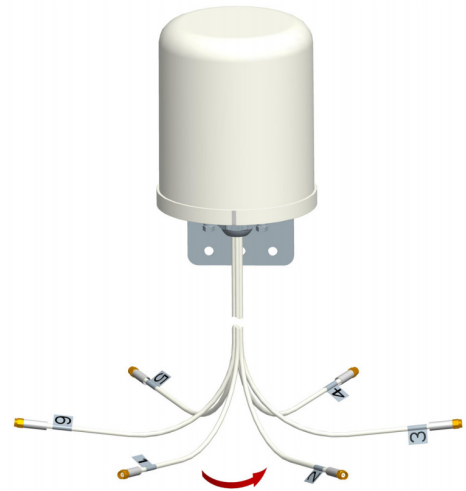


## FEATURE HIGHLIGHTS

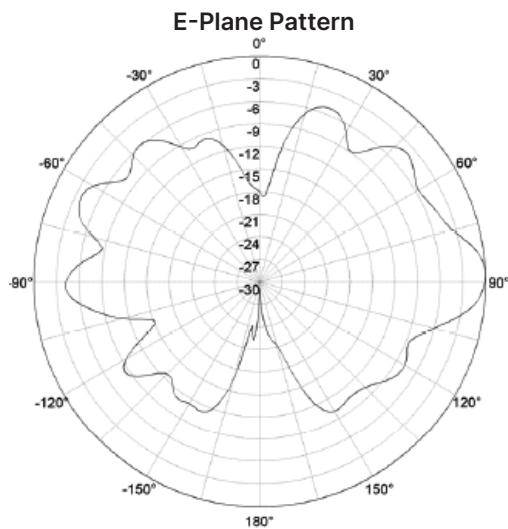
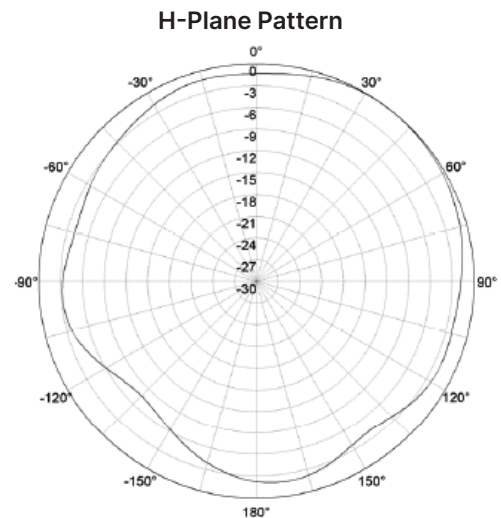
### ANT-O6ABGN-0606-O

#### Outdoor MIMO Omnidirectional Antenna

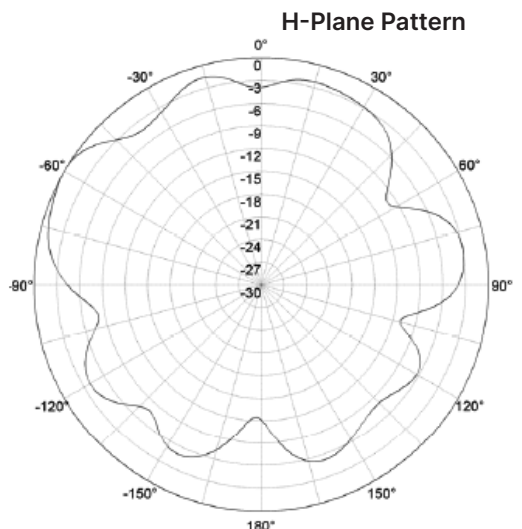
The ANT-O6ABGN-0606-O is an outdoor dual-band six-element omnidirectional antenna for use in 3x3 MIMO applications. Housed in a ruggedized fiberglass enclosure, the antenna can be mounted to a wall, beam, or mast. This antenna features six RP-SMA connectors with 36" Pigtails.



Frequency  
2.4 GHz



Frequency  
5 GHz

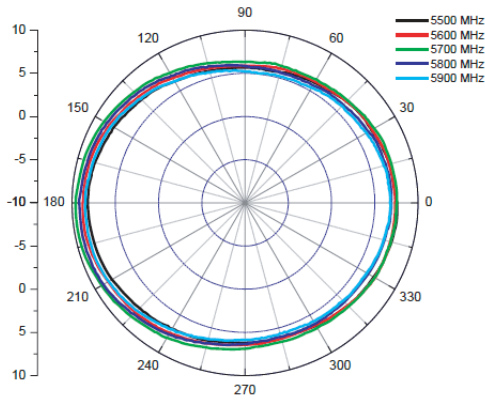


## FEATURE HIGHLIGHTS

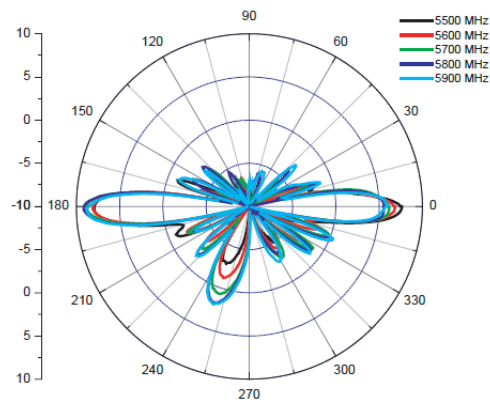
### ANT-A080-NM-2

#### Omnidirectional Antenna for 5 GHz

This omnidirectional antenna provides 360° coverage for standard outdoor deployments.



H-Plane



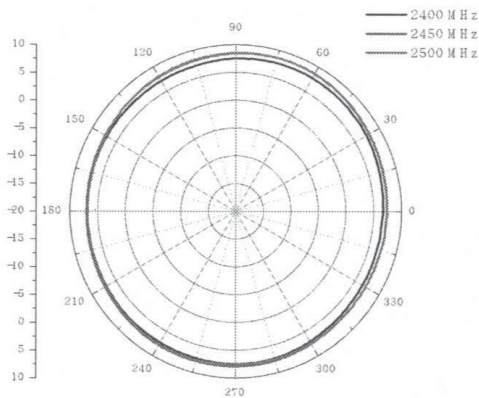
E-Plane



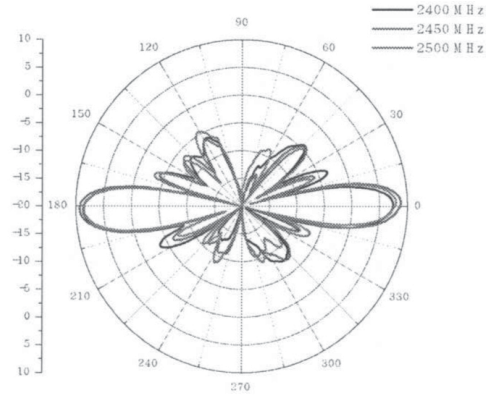
### ANT-BG080-NM

#### Omnidirectional Antenna for 2.4 GHz

This omnidirectional pole-mounted antenna provides 360° coverage for standard outdoor deployments.



H-Plane



E-Plane



## FEATURE HIGHLIGHTS

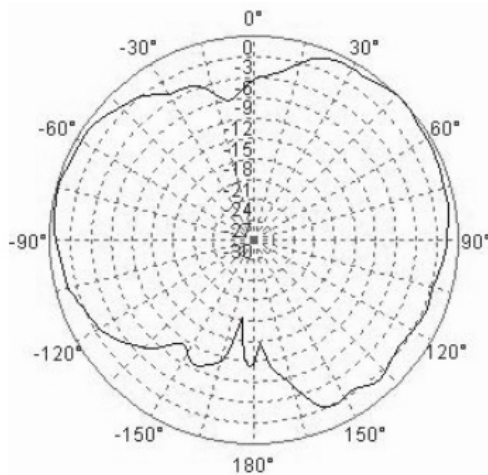
### ANT-I2ABGN-0304-O

#### Ceiling-Mount Omnidirectional Antenna for Indoor Use

The ANT-I2ABGN-0304-O is a dual-band, ceiling-mount omnidirectional antenna, designed to operate indoors. The dual-band frequency coverage means that a single type of antenna can be deployed with any radio in the 2.4–2.5 GHz or 5.1–5.850 GHz bands. The two 36" plenum pigtailed have RP-SMA connectors.

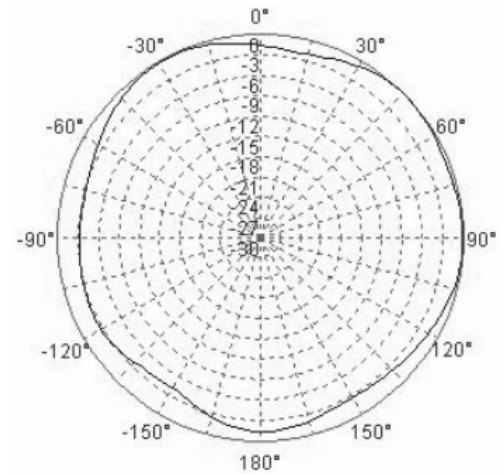


E-Plane Pattern

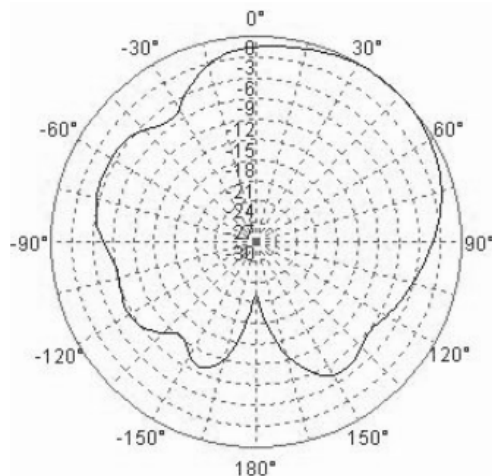


Frequency  
2.4 GHz

H-Plane Pattern

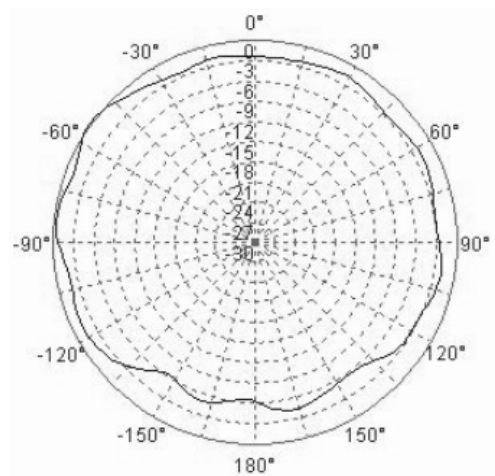


E-Plane Pattern



Frequency  
5 GHz

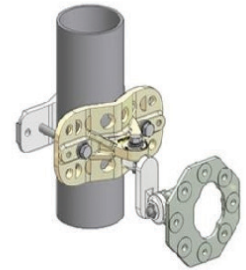
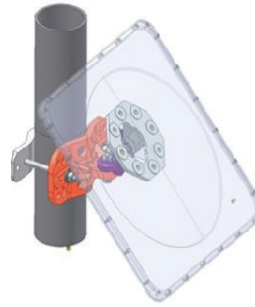
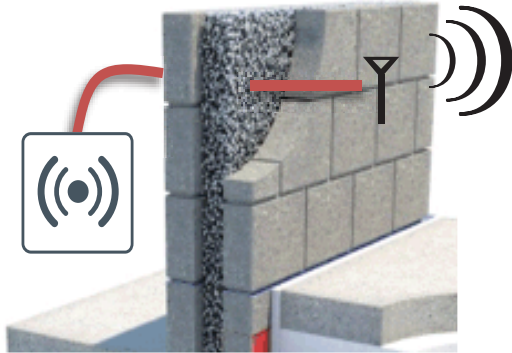
H-Plane Pattern



## FEATURE HIGHLIGHTS

### Mounting Hardware M22 and M22Z

FAN-M22 and FAN-M22Z-5 are versatile adjustable mounts. The M22 is intended for use with the N-type antennas such as the FortiAntenna 612N. The M22Z FortiAntenna mount works with RP-SMA antennas such as FortiAntenna 612R. The mount is made of die-cast aluminum, and suitable for pole and wall mounting.



# SPECIFICATIONS

	FORTIANTENNA 612R	FORTIANTENNA 612N	FORTIANTENNA 614R	FORTIANTENNA 664R
<b>Electrical</b>				
Type	Sector / Patch			
Frequency Range	2.3-2.7 GHz & 4.9-6.1 GHz	2.3-2.7 GHz & 4.9-6.1 GHz	2.3-2.7 GHz & 4.9-6.1 GHz	2.4-2.5 GHz & 5.15-5.875 GHz
Gain	5 dBi	5 dBi	5 dBi	6 dBi
Beam Width Horizontal	120°	120°	120°	60°
Beam Width Vertical	70°	70°	70°	60°
Maximum Input Power	20 Watt	20 Watt	20 Watt	20 Watt
Input Impedance	50 Ohm	50 Ohm	50 Ohm	50 Ohm
VSWR	1.5 : 1 Typical	1.5 : 1 Typical	1.5 : 1 Typical	2.0 : 1 Max
Polarization	Dual Slant +/- 45°			
<b>Mechanical</b>				
Dimension (Height x Width x Diameter)	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")	200 x 200 x 33 mm (7.9" x 7.9" x 1.25")
Number of Connectors	2	2	4	4
Connector Type	RP-SMA Male	N-Type Male	RP-SMA Male	RP-SMA Male
Cable Length	1.2 m (3.9 ft)	1.2 m (3.9 ft)	1.2 m (3.9 ft)	0.75m (2.46 ft)
Weight	400 grams (0.88 lbs)	400 grams (0.88 lbs)	260 grams (0.57 lbs)	260 grams (0.57 lbs)
Mount	Wall (pole mount with optional FAN-M22Z-5)	Wall (pole mount with optional FAN-M22)	Wall (pole mount with optional FAN-M22Z-5)	Wall (pole mount with optional FAN-M22Z-5)
Radome	UV Protected Polycarbonate			
<b>Environmental</b>				
Operating and Storage Temperature Range	-40 -158°F (-40 -70°C)			
Wind Load	N/A	N/A	N/A	220 km/h
Water Proof Rating	IP67			
Vibration	According to IEC 60721-3-4			
Flammability	UL94			
Humidity	ETS 300 019-1-4, EN 302 085 (annex A.1.1)			
<b>Warranty</b>				
Standard Warranty	1 year			



## SPECIFICATIONS

	ANT-O6ABGN-0607-PT	ANT-I2ABGN-0304-O	ANT-O6ABGN-0606-O	ANT-A080-NM-2	ANT-BG080-NM
<b>Electrical</b>					
Type	Sector / Patch	Omnidirectional	Omnidirectional	Omnidirectional	Omnidirectional
Frequency Range	2.4-2.5 GHz & 5.1-5.85 GHz	2.4-2.5 GHz & 5.1-5.85 GHz	2.4-2.5 GHz & 5.15-5.85 GHz	5.47-5.875 GHz	2.4-2.5 GHz
Gain	6 dBi @2.4GHz, 7 dBi @ 5GHz	3 dBi @2.4GHz, 4 dBi @ 5GHz	6 dBi	8.0 dBi	8.0 dBi
Beam Width Horizontal	82° @ 2.4 GHz, 75° @ 5GHz	360°	360°	360°	360°
Beam Width Vertical	72° @ 2.4 GHz, 60° @ 5GHz	100°	35° @ 2.4GHz, 25° @ 5GHz	12°	15°
Maximum Input Power	50 Watt	2 Watt	10 Watt	5 Watt	2 Watt
Input Impedance	50 Ohm	50 Ohm	50 Ohm	50 Ohm	50 Ohm
VSWR	1.5 : 1 Typical @ 2.4GHz, 2.0 : 1 Typical @ 5GHz	2.0 : 1 Typical	1.5 : 1 Typical	2.0 : 1 Max	2.0 : 1 Max
Polarization	Vertical	Vertical	Vertical	Linear, vertical	Linear, vertical
<b>Mechanical</b>					
Dimension (Height x Width x Diameter)	444.5 x 154.9 x 25.4 mm (17.5" x 6.1" x 1.0")	73.7 x 137.2 x 25.4 mm (2.9" x 5.4" x 1.0")	149.9 x 149.9 x 177.8 mm (5.9" x 5.9" x 7")	22 x 22 x 325 mm (0.87" x 0.87" x 12.8")	21 x 21 x 580 mm (0.83" x 0.83" x 22.8")
Number of Connectors	6	2	6	1	1
Connector Type	RP-SMA Male	RP-SMA Male	RP-SMA Male	N-Type Male	N-Type Male
Cable Length	0.91 m (3 ft)	0.91 m (3 ft)	0.91 m (3 ft)	N/A	N/A
Weight	861 grams (1.9 lbs)	177 grams (0.39 lbs)	1,428 grams (3.15 lbs)	110 grams (0.24 lbs)	164 grams (0.36 lbs)
Mount	Wall or Pole Mount	Ceiling mount	Wall or Pole Mount	N/A	N/A
Radome	Polycarbonate	Polycarbonate	Polycarbonate	UV Resistant Fiberglass	Fiberglass
<b>Environmental</b>					
Operating and Storage Temperature Range	-22 -158°F (-30 -70°C)	-40 -158°F (-40 -70°C)	-40 -158°F (-40 -70°C)	-40 -176°F (-40 -80°C)	-40 -176°F (-40 -80°C)
Wind Load	134 mph	N/A	134 mph	N/A	N/A
Water Proof Rating	N/A	N/A	N/A	N/A	N/A
Vibration	N/A	N/A	N/A	N/A	N/A
Flammability	N/A	N/A	N/A	N/A	N/A
Humidity	N/A	N/A	N/A	95% @ 55°C	95% @ 55°C
<b>Warranty</b>					
Standard Warranty	1 year	1 year	1 year	1 year	1 year



## ORDER INFORMATION

PRODUCT	SKU	DESCRIPTION
Fortinet Antennas	FAN-612R	Directional 120° 5 dBi dual-band outdoor panel antenna. Includes two 120cm cables with RP-SMA connectors.
	FAN-612N	Directional 120° 5 dBi dual-band outdoor panel antenna. Includes two 120cm cables with N connectors.
	FAN-614R	Directional 120° 5 dBi wall-mount outdoor 4x4 MIMO sector panel antenna. Includes 4x 1.2 m cables with RP-SMA connectors.
	FAN-664R	60° 6 dBi dual-band 4x4 MIMO sector panel antenna. Includes 75 cm cables with RP-SMA connectors. Purchase FAN-M22 wall/pole mount kit separately.
	ANT-I2ABGN-0304-O	Dual-band 2x2 MIMO ceiling-mount antenna for 3 dBi at 2.4 GHz, 4 dBi at 5 GHz. Two RP-SMA plug connectors with 18 inch / 45 cm cable.
	ANT-O6ABGN-0606-O	Outdoor Dual-band 2x 3-Element Omnidirectional Antenna with 6 leads, 6 dBi at 2.4 GHz, 6 dBi at 5 GHz.
	ANT-O6ABGN-0607-PT	Dual Band Patch 6-lead Antenna for MIMO Applications. Features three integrated 2.4 GHz patch antennas and three integrated 5 GHz patch antennas. 6 dBi at 2.4 GHz, 7 dBi at 5 GHz.
	ANT-A08O-NM-2	8 dBi Omnidirectional Antenna, 5470–5875 MHz (N-Male).
	ANT-BG08O-NM	8 dBi Omnidirectional Antenna 2400–2500 MHz (N-Male).
	Antenna Mount	FAN-M22
FAN-M22Z-5		Pole/wall mount kit for FortiAntenna 612R, 614R, 664R (5-pack)



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