

#### **DATA SHEET**

# **Fortinet Antenna Portfolio**

## **Indoor and Outdoor Antennas**

Fortinet offers many different antenna options that can be used with our FortiAP line of products. These antennas can help to optimize coverage and overall wireless performance in a range of installation settings. Antennas come in a variety of patterns and with various numbers of antenna elements to help installers find the best match for their equipment.



FANT-04ABGN-2504-O-R



FANT-04ABGN-0606-O-R FANT-04ABGN-0606-O-N



FANT-06ABGN-0606-O-R



FANT-06ABGN-2504-O-R



FANT-06ACAX-8509-D-N



FANT-04ABGN-8065-P-N



FANT-04ABGN-1414-P-N



FANT-04ABGN-0606-P-R



FANT-08ABGN-1213-D-R



FANT-10ACAX-1213-D-N

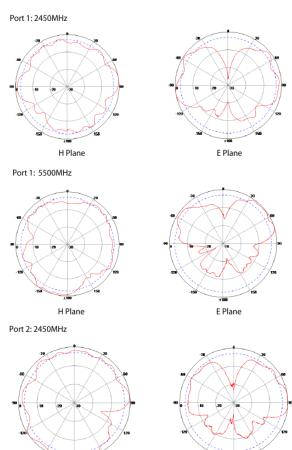
#### **Available Models**

SKU	PATTERN	GAIN	LEADS	APPLICATION
FANT-04ABGN-2504-O-R	Omni	2.5 dBi (2.4 GHz) / 4 dBi (5 GHz)	4 RPSMA	Indoor / Outdoor
FANT-04ABGN-0606-O-R	Omni	6 dBi	4 RPSMA	Indoor / Outdoor
FANT-04ABGN-0606-O-N	Omni	6 dBi	4 N-Type	Indoor / Outdoor
FANT-06ABGN-0606-O-R	Omni	6 dBi	6 RPSMA	Indoor / Outdoor
FANT-06ABGN-2504-O-R	Omni	2.5 dBi (2.4 GHz) / 4 dBi (5 GHz)	6 RPSMA	Indoor Plenum
FANT-04ABGN-0606-P-R	Patch	6 dBi	4 RPSMA	Indoor / Outdoor
FANT-04ABGN-1414-P-N	Patch	14 dBi	4 N-Type	Indoor / Outdoor
FANT-04ABGN-8065-P-N	Patch	8 dBi (2.4 GHz) / 6.5 dBi (5 GHz)	4 N-Type	Indoor / Outdoor
FANT-08ABGN-1213-D-R	Directional	12 dBi (2.4 GHz) / 13 dBi (5 GHz)	8 RPSMA	Indoor / Outdoor
FANT-06ACAX-8509-D-N	Directional	2.4-2.5 GHz @ 6 × 8.5 dBi 5.15-5.875 GHz @ 6 × 9 dBi	6 N-Type	Indoor / Outdoor
FANT-10ACAX-1213-D-N	Directional	12dBi / 13dBi	10 N-Type	Indoor / Outdoor

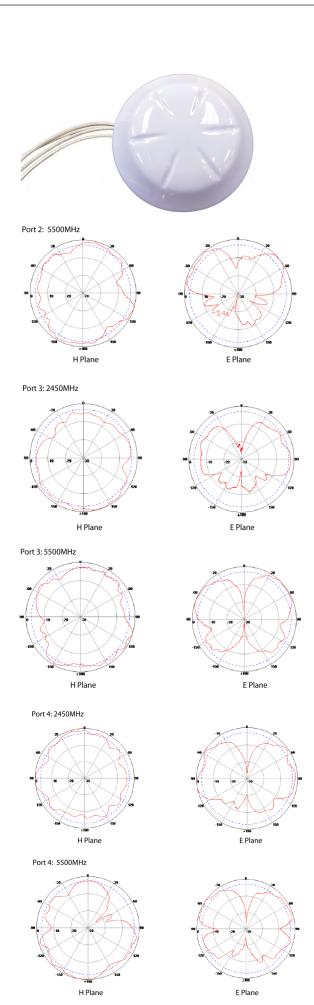
# **FANT-04ABGN-2504-O-R**

This aesthetically pleasing micro omni antenna is optimized for small form factor, aesthetically sensitive, or mobile Wi-Fi applications. This antenna includes four dual band pigtails and RPSMA connectors. This antenna is perfect for wireless installations where low profile and looks are a major consideration. Alternatively, this antenna can be used in vehicles for communication, presence detection, and fleet management.

	SPECIFICATIONS	5	
Frequency Range	2400-2500 MHz	4900-5850 MHz	
Bandwidth	100 MHz	950 MHz	
Gain	2.5 dBi	4 dBi	
Horizontal Beamwidth	360°	360°	
VSWR		≤2	
Nominal Impedance	50 ohms		
Polarization	Vertical		
Max Power	50 Watts		
Connectors	4 x RPSMA Male		
Pigtail length	36 in. with Connector / 91.44 cm with Connector		
Dimensions	3.54 in. x 1.	57 in. (9.0 cm x 4.0 cm)	
Weight	0.27 lbs (124.7 g)		
Environment	Indoor / Outdoor		
Operating Temperature	-40°F to +158°F (-40°C to +70°C)		
Mounting Method	Surface Mount		



E Plane





H Plane

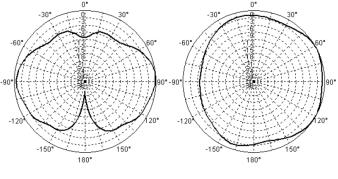
#### FANT-04ABGN-0606-O-R/ **FANT-04ABGN-0606-O-N**

This ruggedized 6 dBi omnidirectional antenna is perfectly suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. This antenna includes four dual band pigtails. Includes an L-Bracket for mast and/or wall mounting.

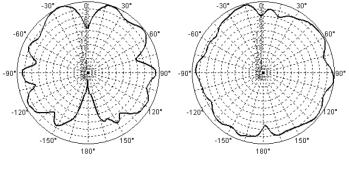
The FANT-08ABGN-0606-O-R version of this antenna (pictured) features RPSMA connectors while the FANT-04ABGN-0606-O-N version of this antenna features N-Type connectors.

	SPECIFICATIONS		
Frequency Range	2400-2500 MHz	5150-5850 MHz	
Bandwidth	100 MHz	700 MHz	
Gain	6 dBi	6 dBi	
Vertical Beamwidth	45°	20°	
Horizontal Beamwidth	360°	360°	
VSWR	≤2.0	≤2.2	
Nominal Impedance	50	ohms	
Polarization	V€	ertical	
Isolation	≤-15dB		
Max Power	10 Watts		
Lightning Protection	Not DC Grounded		
Connectors	4 x RPSMA Male or 4 x N-Type Male		
Dimensions	5.9 in. x 7 in. (14.99 cm x 17.78 cm)		
Pigtail Length	36 in. with Connector / 91.44 cm with Connector		
Weight	2.64 lbs. (1.2 kg)		
Environment	Indoor / Outdoor		
Mast Mount Diameter	1.37 in 1.97 in. (3.48 cm x 5.0 cm)		
Operating Temperature	-40°F to +158°F (-40°C to +70°C)		
Wind Load	134 mph (216 km/h)		
Mounting Method	Mast and/or Wall Mounting		





E-Plane Pattern H-Plane Pattern 2.4 GHz



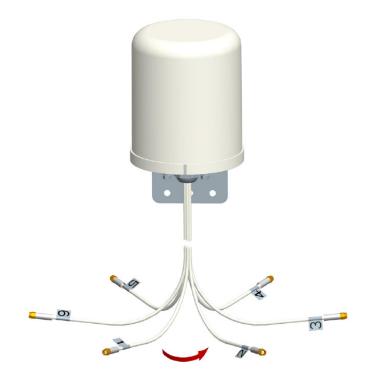
E-Plane Pattern H-Plane Pattern 5 GHz

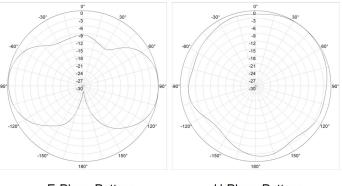


#### **FANT-06ABGN-0606-O-R**

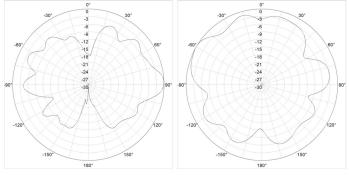
This ruggedized 6 dBi omnidirectional antenna is perfectly suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. This antenna includes six dual band pigtails and RPSMA connectors. Includes an L-Bracket for mast and or wall mounting.

	SPECIFICATIONS		
Frequency Range	2400-2500 MHz	5150-5850 MHz	
Bandwidth	100 MHz	100 MHz	
Gain	6 dBi	6 dBi	
Vertical Beamwidth	35°	25°	
Horizontal Beamwidth	360°	360°	
VSWR	Typica	al ≤1.5 - 2.0	
Nominal Impedance	50	) ohms	
Polarization	Vertical		
Isolation	≤-15dB		
Max Power	10 Watts		
Lightning Protection	Not DC Grounded		
Connectors	6 x RPSMA Male		
Pigtail Length	36 in. with Connector / 91.44 cm with Connector		
Dimensions	5.9 in. x 7 in. (14.99 cm x 17.78 cm)		
Weight	3.15 lbs. (1.43 kg)		
Environment	Indoor / Outdoor		
Mast Mount Diameter	1.37 in 1.97 in. (3.48 cm x 5.0 cm)		
Operating Temperature	-40°F to +158°F (-40°C to +70°C)		
Wind Load	134 mph (216 km/h)		
Mounting Method	Mast and/or Wall Mounting		









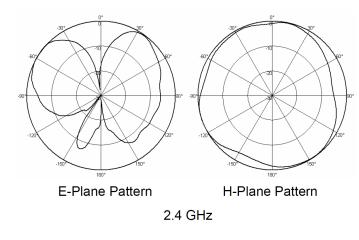
E-Plane Pattern H-Plane Pattern 5 GHz

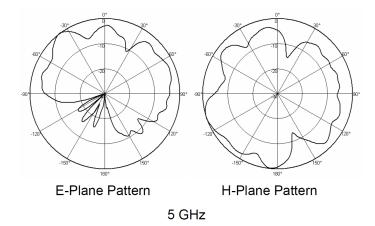
## **FANT-06ABGN-2504-O-R**

This ceiling mount 2.5 dBi (2.4GHz) / 4 dBi (5GHz) omnidirectional antenna is well suited to ceiling installations where looks matter. This antenna includes six dual band pigtails and RPSMA connectors.

	SPECIFICATIONS		
Frequency Range	2400-2483 MHz	5150-5850 MHz	
Bandwidth	83 MHz	700 MHz	
Gain	2.5 dBi	4 dBi	
Vertical Beamwidth	55°	60°	
Horizontal Beamwidth	360°	360°	
VSWR	≤2.0	≤2.5	
Nominal Impedance	50 ohms		
Polarization	Vertical		
Max Power	50 Watts		
Connectors	6 x RPSMA Male		
Pigtail Length	36 in. with Connector / 91.44 cm with Connector		
Dimensions	7.1 in. x 5.1 in. x 1.9 in. (18.03 cm x 12.95 cm x 4.83 cm)		
Weight	0.68 lbs. (0.31 kg)		
Environment	Indoor - Plenum rated		
Operating Temperature	-40°F to +158°F (-40°C to +70°C)		
Mounting Method	Ceiling		



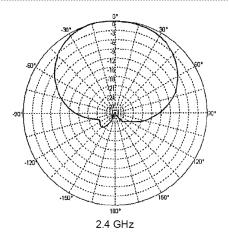




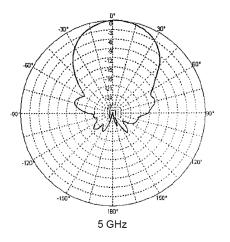
## FANT-04ABGN-0606-P-R

This 6 dBi patch antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. This antenna includes four dual band pigtails and RPSMA connectors. An articulating mount is included with the antenna.

	SPECIFICATIONS		
	SPECIFICATIONS		
Frequency Range	2400-2500 MHz	5150-5850 MHz	
Gain	6 dBi	6 dBi	
Vertical Beamwidth	80±20° / 45±20°	80±20° / 45±20°	
Horizontal Beamwidth	80±20° / 45±20°	80±20° / 45±20°	
VSWR	≤2.0	≤2.5	
Front-to-back ratio	≤18		
Nominal Impedance	50 ohms		
Polarization	Vertical		
Max Power	100 Watts		
Connectors	4 x RPSMA Male		
Pigtail Length	36 in. with Connector / 91.44 cm with Connector		
Dimensions	9.2 in. x 9.0 in. x 1.1 in. (23.37 cm x 22.86 cm x 2.79 cm)		
Weight	2.65 lbs. (1.2 kg)		
Environment	Indoor / Outdoor		
Operating Temperature	-40°F to +140°F (-40°C to +60°C)		
Mounting Style	Wall or N	Mast/Pole	





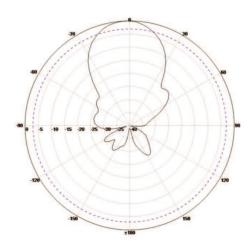




# FANT-04ABGN-1414-P-N

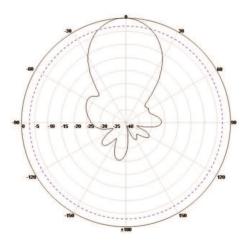
This high density 14 dBi patch antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. The antenna features a 35-degree beamwidth at both the 2.4GHz and 5GHz bands which helps to minimize co-channel interference. This antenna features four dual band N-Type jacks on the back of the antenna.

	SPECIFICATIONS		
Frequency Range	2400-2500 MHz	5150-5850 MHz	
Bandwidth	100 MHz	700 MHz	
Gain	14 dBi	14 dBi	
Vertical Beamwidth	35°	35°	
Horizontal Beamwidth	35°	35°	
VSWR	5	≤2	
Nominal Impedance	50 (	50 ohms	
Polarization	Vertica	Vertical / Linear	
Isolation	≤2	≤28dB	
Max Power	50 \	50 Watts	
Connectors	N-Тур	N-Type Male	
Pigtail Length	Need to ord	ed to order separately	
Mounting Method	Mast N	Mast Mounting	
Dimensions	14.96 in. x 14.96 in. x 1.3 ir	6 in. x 1.3 in. (38 cm x 38 cm x 3.3 cm)	
Weight	7.5 lbs. (3.4 kg)		
Pole Diameter	1.97 in 4.7 in. (5 cm to 11.94 cm)		
Environment	Indoor / Outdoor		
Operating Temperature	-22°F to +158°F (-30°C to +70°C)		



H Plane





E Plane

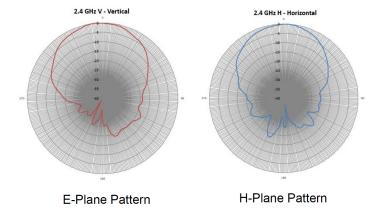


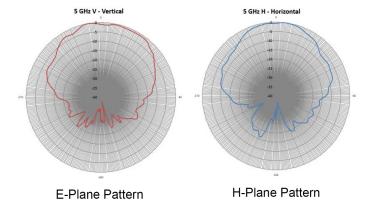
## FANT-04ABGN-8065-P-N

This 8 dBi (2.4 GHz) / 6.5 dBi (5GHz) patch antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. The antenna pattern and beamwidth facilitate specific coverage planning. This antenna features four dual band pigtails and N-Type connectors.

	SPECIFICATIONS	
Frequency Range	2.4-2.5 GHz	5.1-5.9 GHz
Gain	8 dBi	6.5 dBi
Vertical Beamwidths	65°	70°
Horizontal Beamwidths	60°	65°
Nominal Impedance	50 ohms	50 ohms
VSWR		<2
Front-to-Back Ratio (dB)	>13	>15
Port-to-Port Isolation (dB)	>25	>30
Connectors	4 x N-Type Male	
Cable Length	24 in. (60.96 cm)	
Dimensions	7.5 in. x 7.5 in. x 1.5 in. (19.05 × 19.05 × 3.81 cm)	
Weight	2.5 lb. (1.134 kg)	
Environment	Indoor / Outdoor	
Ingress Protection	IP-66 Compliant	
Operating Temperature	-40°F to +140°F (-40°C to +60°C)	







#### FANT-08ABGN-1213-D-R

This high gain directional antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. The antenna features narrow beamwidth to help minimize cochannel interference in dense deployments and facilitate highly specific coverage planning. This antenna features eight dual band pigtails and RPSMA connectors. An articulating mount is included with the antenna.

	SPECIFICATIONS		
Frequency Range	2400-2500 MHz	5150-5850 MHz	
Bandwidth	100 MHz	700 MHz	
Gain	12 dBi	13 dBi	
VSWR	≤2.	25	
Nominal Impedance	50 ol	hms	
Polarization	4x Horizontal	/ 4x Vertical	
Vertical Beamwidth	45° / 28° (Ports 1-4);	50° / 40° (Ports 5-8)	
Horizontal Beamwidth	50° / 40° (Ports 1-4); 45° / 28° (Ports 5-8)		
Front-to-Back Ratio (dB)	≤19		
Port-to-Port Isolation	≤18 ≤25		
Max Power	50 Watts		
Connectors	8 x RPSMA Male		
Pigtail length	36 in. with Connector / 9	1.44 cm with Connector	
Dimensions (LxWxH)	12 in. x 12 in. x 1.5 in. (30.48 cm x 30.48 cm x 3.81 cm)		
Weight	2.1 lbs. (0.95 kg)		
Environment	Indoor / Outdoor		
Ingress Protection	IP-54 Compliant		
Wind Load	100 mph (160 km/h)		
Operating Temperature	-40° to 140° F (-40° to 60° C)		





## FANT-06ACAX-8509-D-N

This 8.5 dBi (2.4 GHz) / 9 dBi (5GHz) vertically polarized antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. This antenna features six dual band pigtails and N-Type connectors.

	SPECIFICATIONS	
Frequency Range	2.4-2.5 GHz	5.15-5.875 GHz
Gain	8.5 dBi	9 dBi
Vertical Beamwidths	65°	70°
Horizontal Beamwidths	60°	65°
Nominal Impedance	50 ohm	50 ohm
VSWR	2.0	): 1 max
Front-to-Back Ratio (dB)	-20 dB	-20 dB
Port-to-Port Isolation (dB)	20	30
Connectors	6 × 1.2 meter Pigtail with N-Type Male	
Cable Length	not included	
Dimensions	11.8 in. x 11.8 in. x 1.77 in. (300 × 300 × 45 mm)	
Weight	TBD	
Environment	Indoor / Outdoor	
Ingress Protection	IP-65 Compliant	
Operating Temperature	-40°F to +149°	°F (-40°C to +65°C)



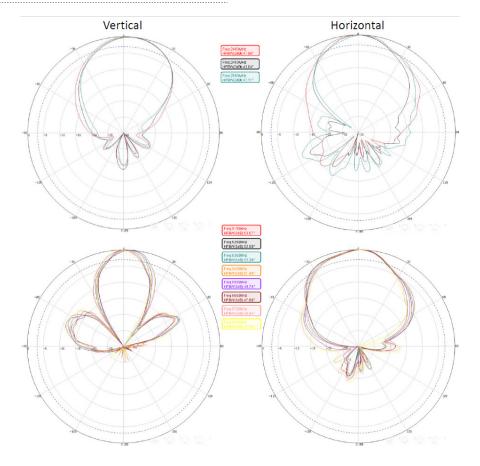


## **FANT-10ACAX-1213-D-N**

This high gain directional antenna is well suited for use outdoors, in warehouses, or in manufacturing environments where it must withstand exposure to moisture and dust. The narrow beam widths of this dual-polarized antenna are ideal for high-density environments including large public venues. This antenna features ten dual band pigtails and Type N connectors. An articulating mount is included with the antenna.

	SPECIFICATIONS		
Frequency Range	2.4-2.5 GHz	5.1-5.9 GHz	
Gain	12 dBi	13 dBi	
Vertical Beamwidths	65°	70°	
Horizontal Beamwidths	60°	65°	
Nominal Impedance	50 ohms	50 ohms	
VSWR	≤2.0		
Front-to-Back Ratio (dB)	≤18	≤25	
Port-to-Port Isolation (dB)	≤28		
Connectors	10 x N-Male		
Cable Length	36 in. RG58 (91.4 cm)		
Dimensions	14.6 in. x 14.6 in. x 1.5 in. (37.1 × 37.1 × 3.81 cm)		
Weight	2.6 lb. (1.18 kg)		
Environment	Indoor / Outdoor		
Ingress Protection	IP-54 Compliant		
Operating Temperature	-40°F to +140°F (-40°C to +60°C)		





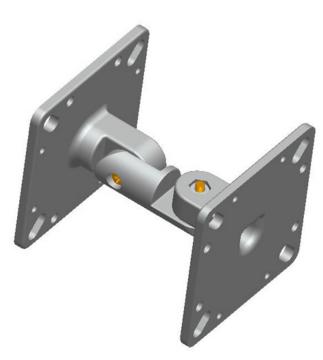


# **MOUNTING HARDWARE**

SKU	MOUNTING HARDWARE INCLUDED	MOUNTING BRACKET BOLT PATTERN	MOUNT STAND OFF ANTENNA DISTANCE
FANT-04ABGN-2504-O-R	Nut (Ceiling Mount)	N/A	N/A
FANT-04ABGN-0606-O-R	L-Bracket	1.97 in. x 2.36 in.	1.5 in.
FANT-04ABGN-0606-O-N	L-Bracket	1.97 in. x 2.36 in.	1.5 in.
FANT-06ABGN-0606-O-R	L-Bracket	1.97 in. x 2.36 in.	1.5 in.
FANT-06ABGN-2504-O-R	Nut (Ceiling Mount)	N/A	N/A
FANT-04ABGN-0606-P-R	Universal Articulating Mount	2 in. x 2 in.	3.3 in.
FANT-04ABGN-1414-P-N	Industrial Articulating Mount	Multiple (incl. 2 in. x 2 in.)	5.91 in.
FANT-04ABGN-8065-P-N	Universal Articulating Mount	2 in. x 2 in.	3.3 in.
FANT-08ABGN-1213-D-R	10 in. Strong Arm Mount	2 in. x 2 in.	10 in.



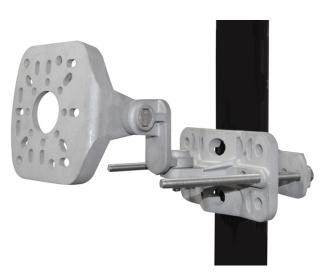
L-Bracket



**Universal Articulating Mount** 



**Strong Arm Mount** 



**Industrial Articulating Mount** 

## **SKU COMPARISON**

SKU	FANT-04ABGN-2504-0-R	Fant-04abgn-0606-0-r / Fant-04abgn-0606-0-n	FANT-06ABGN-0606-O-R	FANT-06ABGN-2504-0-R	FANT-04ABGN-0606-P-R	FANT-04ABGN-1414-P-N	FANT-04ABGN-8065-P-N	FANT-08ABGN-1213-D-R
Frequency	2400-2500 MHz 4900-5850 MHz	2400-2500 MHz 5150-5850 MHz	2400-2500 MHz 5150-5850 MHz	2400-2483 MHz 5150-5850 MHz	2400-2500 MHz 5150-5850 MHz	2400-2500 MHz 5150-5850 MHz	2400-2500 GHz 5100-5900 GHz	2400-2500 MHz 5150-5850 MHz
Bandwidth	100 MHz & 950 MHz	100 MHz & 700 MHz	100 MHz	83 MHz & 700 MHz		100 MHz & 700 MHz		100 MHz & 700 MHz
Gain	2.5 dBi / 4 dBi	6 dBi	6 dBi	2.5 dBi / 4 dBi	6 dBi	14 dBi	8 dBi / 6.5 dBi	12 dBi / 13 dBi
Vertical Beamwidth		45° / 20°	35° / 25°	55° / 60°	80±20° / 45±20°	35°	65° / 70°	45° / 28° (Ports 1-4) 50° / 40° (Ports 5-8)
Horizontal Beamwidth	360°	360°	360°	360°	80±20° / 45±20°	35°	60° / 65°	50° / 40° (Ports 1-4) 45° / 28° (Ports 5-8)
VSWR	≤2	≤2.2	Typical ≤1.5 - 2.0	≤2.0 / ≤2.5	≤2.0 / ≤2.5	≤2	<2	≤2.25
Front-to-back ratio					≤18		>13 dB / >15 dB	≤19 dB
Port to Port Isolation							>25 dB / >30 dB	≤18 dB / ≤ 25 dB
Nominal Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Polarization	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical / Linear		4x Horizontal / 4x Vertical
Isolation		≤-15dB	≤-15dB			≤28dB		
Max Power	50 Watts	10 Watts	10 Watts	50 Watts	100 Watts	50 Watts		50 Watts
Lightning Protection		Not DC Grounded	Not DC Grounded					
Connectors	4 x RPSMA Male	4 x RPSMA Male or 4 x N-Type Male	6 x RPSMA Male	6 x RPSMA Male	4 x RPSMA Male	N-Type Male	4 x N-Type Male	8 x RPSMA Male
Cable Length	4X CABLE RPSMA PLUG D12MM HOLE	- 4X 36INCH-CABLE RPSMA PLUG 4X 36INCH-CABLE N-PLUG	6X 36INCH-CABLE RPSMA PLUG	6X 36INCH-CABLE RPSMA PLUG	4X 36INCH-CABLE RPSMA PLUG		4X 24INCH-CABLE N-PLUG	8X 36INCH-CABLE RPSMA PLUC
Pigtail Length	36 in. with Connector 91.44 cm with Connector	36 in. with Connector 91.44 cm with Connector	36 in. with Connector 91.44 cm with Connector	36 in. with Connector 91.44 cm with Connector	36 in. with Connector 91.44 cm with Connector	Need to order separately		36 in. with Connector 91.44 cm with Connector
Environment	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor	Indoor - Plenum rated	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor
Ingress Protection							IP-66 Compliant	IP-54 Compliant
Operating Temperature	-40°F to +158°F -40°C to +70°C	-40°F to +158°F -40°C to +70°C	-40°F to +158°F -40°C to +70°C	-40°F to +158°F -40°C to +70°C	-40°F to +140°F -40°C to +60°C	-22°F to +158°F -30°C to +70°C	-40°F to +140°F -40°C to +60°C	-40° to 140° F -40° to 60° C
Wind Load		134 mph 216 km/h	134 mph 216 km/h					100 mph 160 km/h
Mounting Method	Surface	Mast or Wall	Mast or Wall	Ceiling	Wall or Mast/Pole	Mast		

## **ORDER INFORMATION**

PRODUCT	SKU	DESCRIPTION
Fortinet Antennas	FANT-04ABGN-2504-O-R	2.4/5GHz 2.5/4dBi Wi-Fi Omni Micro Antenna with 4 RPSMA Connectors
		2.4/5GHz 6dBi Wi-Fi Omni Antenna with 4 RPSMA Connectors
		2.4/5GHz 6dBi Wi-Fi Omni Antenna with 4 N-Style Connectors
	FANT-06ABGN-0606-O-R	2.4/5GHz 6dBi Wi-Fi Omni Antenna with 6 RPSMA Connectors
	FANT-06ABGN-2504-O-R	2.4/5GHz 2.5/4 dBi Wi-Fi Omni Antenna with 6 RPSMA Connectors (Ceiling Mount)
		2.4/5GHz 6dBi Wi-Fi Patch (H:80/45/V:45/80) Antenna with 4 RPSMA Connectors
	FANT-04ABGN-1414-P-N	2.4/5GHz 14dBi Wi-Fi Patch (H:35/V:35) Antenna with 4 N-Style Connectors
	FANT-04ABGN-8065-P-N	2.4/5GHz 8/6.5dBi Wi-Fi Patch (H:60/65/V:65/70) Antenna with 4 N-Style Connectors
	FANT-08ABGN-1213-D-R	2.4/5 GHz 12/13 dBi Wi-Fi Directional Antenna (H:50/40/V:45/28) with 8 RPSMA Connectors
		2.4/5 GHz 8.5/9 dBi Wi-Fi Directional Antenna
	FANT-10ACAX-1213-D-N	2.4/5 GHz 12/13 dBi Wi-Fi Directional Antenna with 10 N-Male Connector



www.fortinet.com

Copyright © 2021 Fortinet, Inc., All rights reserved. FortiGate\*, Fortigate\*,