Overview



### Models

HP 8 dBi @ 2.4GHz Outdoor Omnidirectional Antenna	J8444A
HP 5 dBi @2.4GHz Indoor/Outdoor Omnidir Antenna	J8441A
HP Dual-Band Antenna Lightning Arrester	J8996A
HP 3 dBi Dual-Band Diversity Antenna	J8997A
HP 7 dBi Dual-Band Directional Antenna	J8999A
HP / dBi Dual-Band Directional Antenna	18999A

### Product overview

The E-series family of 2.4 GHz, 5 GHz, and dual-band access point antennas is specifically designed to meet the needs of today's most demanding wireless LAN deployments. E-series external antennas support both single- and dual-band access point deployments, providing maximum flexibility to help optimize coverage and radio signal predictability. Each external antenna includes the necessary installation hardware to extend a robust wireless network across an entire campus, or for in-building environments.

## Features and benefits

### Additional information

- High-gain omnidirectional or directional antennas: provide specific RF pattern characteristics to increase wireless coverage and signal gain or overcome physical/RF interference
- Choice of indoor and outdoor antennas: extend the reach of a wireless LAN within an office, warehouse, or retail environment or for campus-wide indoor and outdoor coverage
- Choice of mounting options: for ease of deployment, each antenna includes the necessary mounting hardware to quickly get a wireless LAN up and running
- Certified external antennas: specifically designed and certified for use with wireless access points



## Technical Specifications

HP 8 dBi @ 2.4GHz	Electrical characteristics	Frequency range 1	2400 - 2500
Outdoor Omnidirectional Antenna (J8444A)			8
		VSWR max	1.5:1
		E-Plane (3 dB beamwidth)	13 degrees
		H-Plane (3 dB beamwidth)	Omnidirectional
		Polarization	Linear (vertical)
		Impedance (Ohms)	50
		RF connector	N (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	Dimensions	25.25(h) in. (64.14 cm)
		Wind surface area	0.11 sq. ft. (0.01 sq. m)
		Wind survival	125 mph (201.13 km/hr)
		Weight	0.5 lb. (0.23 kg)
		Mounting style	Mast
		Enclosure	Polycarbonate
	Environment	Operating temperature	-22°F to 131°F (-30°C to 55°C)
		Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)
	Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
		services and response time	•
	Electrical characteristics	services and response time	•
HP 5 dBi @2.4GHz Indoor/Outdoor Omnidir Antenna (J8441A)		services and response time office. Frequency range 1 Gain 1 dBi (with antenna	s in your area, please contact your local HP sales
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1	s in your area, please contact your local HP sales 2400 - 2500
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable)	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth)	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth)	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical)
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms)	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms) RF connector	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50 Reverse SMA (male)
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms) RF connector Cable length	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50 Reverse SMA (male) 2.75 ft. (0.84 m)
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms) RF connector Cable length Dimensions	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50 Reverse SMA (male) 2.75 ft. (0.84 m) 11.5(h) in. (29.21 cm)
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms) RF connector Cable length Dimensions Wind surface area	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50 Reverse SMA (male) 2.75 ft. (0.84 m) 11.5(h) in. (29.21 cm) 0.08 sq. ft. (0.01 sq. m)
Indoor/Outdoor Omnidir		services and response time office. Frequency range 1 Gain 1 dBi (with antenna cable) VSWR max E-Plane (3 dB beamwidth) H-Plane (3 dB beamwidth) Polarization Impedance (Ohms) RF connector Cable length Dimensions Wind surface area Wind survival	s in your area, please contact your local HP sales 2400 - 2500 4.4 1.7:1 31 degrees Omnidirectional Linear (vertical) 50 Reverse SMA (male) 2.75 ft. (0.84 m) 11.5(h) in. (29.21 cm) 0.08 sq. ft. (0.01 sq. m) 125.1 mph (201.13 km/hr)



Technical Specificati	ons			
	Environment	Operating temperature	-22°F to 131°F (-30°C to 55°C)	
		Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)	
	Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		
HP Dual-Band Antenna	Electrical characteristics	VSWR max	1.4:1	
Lightning Arrester (J8996A)	Physical characteristics	Dimensions	2.4(d) x 0.9(w) x 1.2(h) in. (6.1 x 2.29 x 3.05 cm)	
	Notes	Input RF power, 100 MHz/6000 MHz: 250 W/10 W 50 Meg Ohm insulation resistance Maximum insertion loss of 0.4 dB		
	Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sale office.		
HP 3 dBi Dual-Band	Electrical characteristics	Frequency range 1	2400 - 2500	
Diversity Antenna (J8997A)		Gain 1 dBi (with antenna cable)	3	
		Frequency range 2	4900 - 5990	
		<b>Gain 2 dBi</b> (with antenna cable)	4	
		VSWR max	2.0:1	
		E-Plane (3 dB beamwidth)	60 degrees	
		E-plane radiation plots	2.45 GHz, E Plane	
		H- <b>Plane</b> (3 dB beamwidth)	Omnidirectional	
		H-plane radiation plots	2.45 GHz, H Plane	
		Impedance (Ohms)	50	
		Grounding	DC	
		RF connector	Reverse SMA (male)	
		Cable length	2.75 ft. (0.84 m)	
	Physical characteristics	Dimensions	6.16(d) x 3.66(w) x 0.89(h) in. (15.65 x 9.3 x 2.26 cm)	
		Weight	0.5 lb. (0.23 kg)	
		Mounting style	Ceiling grid	
		Enclosure	PVC/Acrylic	
	Environment	Operating temperature	-22°F to 131°F (-30°C to 55°C)	
		Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)	



### **Technical Specifications**

	Services Electrical characteristics	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
HP 7 dBi Dual-Band		Frequency range 1	2400 - 2500
<b>Directional Antenna</b> (J8999A)		Gain 1 dBi (with antenna cable)	6.9
		Frequency range 2	4900 - 5990
		<b>Gain 2 dBi</b> (with antenna cable)	7.7
		VSWR max	2.0:1
		E-Plane (3 dB beamwidth)	66 degrees
		E-plane radiation plots	E Plane 2.45 GHz
		H-Plane (3 dB beamwidth)	68 degrees
		H-plane radiation plots	H Plane 2.45 GHz
		Polarization	Linear (vertical)
		<b>Impedance</b> (Ohms)	50
		RF connector	Reverse SMA (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	Dimensions	5.16(d) x 5.16(w) x 1.37(h) in. (13.11 x 13.11 x 3.48 cm)
		Wind surface area	0.12 sq. ft. (0.01 sq. m)
		Wind survival	120 mph (193.08 km/hr)
		Weight	0.5 lb. (0.23 kg)
		Mounting style	Flush wall mount, articulating wall, or mast
		Enclosure	PVC/Acrylic
		Front-to-back ratio (dB)	10
	Environment	Operating temperature	-22°F to 131°F (-30°C to 55°C)
		Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)
	Services	the service-level description	www.hp.com/networking/services for details on ns and product numbers. For details about s in your area, please contact your local HP sales

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