

## ProCurve External Access Point Antennas

The ProCurve 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.

ProCurve 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.



# ProCurve External Access Point Antennas

## Features and benefits

- **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/outdoor coverage
- **Choice of mounting options:** for ease of deployment, each ProCurve antenna includes necessary mounting hardware

- **Certified external antennas:** specifically designed and certified for use with ProCurve wireless access points
- **Lifetime warranty:** for as long as you own the product, with next-business-day advance replacement (available in most countries)

## Services

Check [www.hp.com/go/procurveservices](http://www.hp.com/go/procurveservices) for part numbers and service-level descriptions. For details about services and response times in your area, please contact your local HP sales office.

## Specifications



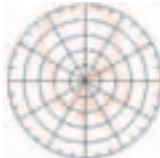

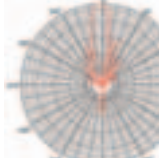


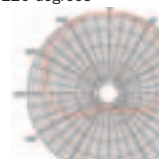
**ProCurve 7 dBi Indoor/Outdoor Directional Antenna (J8443A)**



**ProCurve 6.5 dBi Indoor/Outdoor Directional Diversity Antenna (J8445A)**



**ProCurve 11 dBi Indoor/Outdoor Wide Angle Directional Antenna (J8446A)**

	ProCurve 7 dBi Indoor/Outdoor Directional Antenna (J8443A)	ProCurve 6.5 dBi Indoor/Outdoor Directional Diversity Antenna (J8445A)	ProCurve 11 dBi Indoor/Outdoor Wide Angle Directional Antenna (J8446A)
<b>Frequency (MHz)</b>	2400–2500	2400–2500	2400–2500
<b>Gain dBi (with antenna cable)</b>	6.7	6.4	10.4
<b>VSWR max</b>	1.7:1	1.7:1	1.7:1
<b>E-Plane (3 dB beamwidth)</b>	50 degrees	55 degrees	13 degrees
			
<b>H-Plane (3 dB beamwidth)</b>	65 degrees	80 degrees	120 degrees
			
<b>Polarization</b>	Linear (vertical)	Linear (vertical)	Linear (vertical)
<b>Impedance (ohms)</b>	50	50	50
<b>Grounding</b>	N/A	dc	N/A
<b>RF connector</b>	Reverse SMA (male)	Reverse SMA (male)	Reverse SMA (male)
<b>Weight</b>	0.23 kg (0.5 lb.)	0.27 kg (0.6 lb.)	0.68 kg (1.5 lb.)
<b>Mounting style</b>	Flush wall mount, articulating wall, or mast	Flush wall mount, articulating wall, or mast	Flush wall mount, articulating wall, or mast
<b>Front-to-back ratio (dB)</b>	12	15	18
<b>Dimensions (D x W x H)</b>	11.68 x 9.65 x 3.05 cm (4.6 x 3.8 x 1.2 in.)	17.02 x 12.07 x 2.13 cm (6.7 x 4.75 x 0.84 in.)	8.13 x 58.93 x 5.33 cm (3.2 x 23.2 x 2.1 in.)
<b>Height</b>	N/A	N/A	N/A
<b>Wind surface area</b>	N/A	N/A	0.05 sq. m (0.55 sq. ft.)
<b>Wind survival</b>	N/A	N/A	201.13 km/hr (125 mph)
<b>Enclosure</b>	UV stable PVC	ASA	Acrylic/PVC
<b>Cable length</b>	0.84 m (2.75 ft.)	0.84 m (2.75 ft.)	0.84 m (2.75 ft.)
<b>Operating temperature</b>	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)
<b>Storage temperature</b>	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Wireless Access Point 420	ProCurve Wireless Access Point 420	ProCurve Wireless Access Point 420 ProCurve Wireless Access Point 520wl
<b>Regulatory restrictions</b>	Not approved for use in North America with the ProCurve Wireless Access Point 520wl	Not approved for use in North America with the ProCurve Wireless Access Point 520wl	Not approved for use in North America with the ProCurve Wireless Access Point 520wl

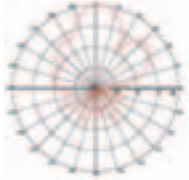
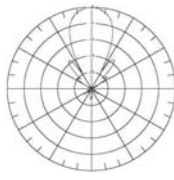
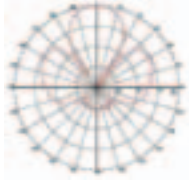
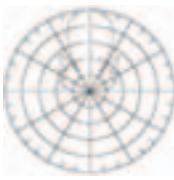
# ProCurve External Access Point Antennas



**ProCurve 14 dBi 5 GHz Directional Antenna (J9000A)**



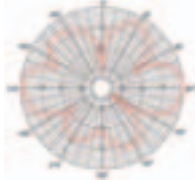
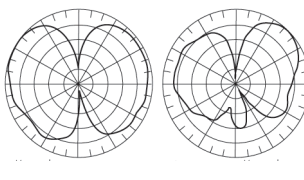
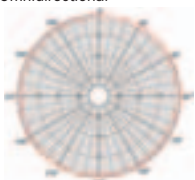
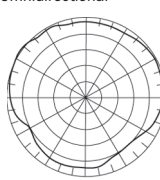
**ProCurve 14 dBi Yagi Antenna (J8448B)**

<b>Frequency (MHz)</b>	5150–5875	2400–2500
<b>Gain dBi (with antenna cable)</b>	13.3	13.8
<b>VSWR max</b>	2.0:1	1.7:1
<b>E-Plane (3 dB beamwidth)</b>	27 degrees	30 degrees
		
<b>H-Plane (3 dB beamwidth)</b>	29 degrees	34 degrees
		
<b>Polarization</b>	Linear (vertical)	N/A
<b>Impedance (ohms)</b>	50	50
<b>Grounding</b>	dc	N/A
<b>RF connector</b>	Reverse SMA (male)	N-type (female)
<b>Weight</b>	0.32 kg (0.7 lb.)	0.57 kg (1.25 lb.)
<b>Mounting style</b>	Flush wall mount, articulating wall, or mast	Wall or mast mount
<b>Front-to-back ratio (dB)</b>	17	18
<b>Dimensions (D x W x H)</b>	10.57 x 10.57 x 3.48 cm (4.16 x 4.16 x 1.37 in.)	67.31 x 9.53 x 3.81 cm (26.5 x 3.75 x 1.5 in.)
<b>Height</b>	N/A	N/A
<b>Wind surface area</b>	0.01 sq. m (0.12 sq. ft.)	0.07 sq. m (0.70 sq. ft.)
<b>Wind survival</b>	193.08 km/hr (120 mph)	160.9 km/hr (100 mph)
<b>Enclosure</b>	PVC/Acrylic	Polycarbonate
<b>Cable length</b>	0.84 m (2.75 ft.)	0.52 m (1.7 ft.)
<b>Operating temperature</b>	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)
<b>Storage temperature</b>	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Access Point 530 ProCurve Radio Port 220	ProCurve Access Point 530 ProCurve Wireless Access Point 520wl
<b>Regulatory restrictions</b>	N/A	Not approved for use in the United States with the ProCurve Access Point 520wl

# ProCurve External Access Point Antennas

## Specifications



	<b>ProCurve 5 dBi Indoor/Outdoor Omnidirectional Antenna (J8441A)</b>	<b>ProCurve 2 dBi Indoor Omnidirectional Diversity Antenna (J8442A)</b>
<b>Frequency (MHz)</b>	2400–2500	2400–2500
<b>Gain dBi (with antenna cable)</b>	4.4	1.4
<b>VSWR max</b>	1.7:1	1.7:1
<b>E-Plane (3 dB beamwidth)</b>	31 degrees 	80 degrees 
<b>H-Plane (3 dB beamwidth)</b>	Omnidirectional 	Omnidirectional 
<b>Polarization</b>	N/A	Linear
<b>Impedance (ohms)</b>	50	50
<b>Grounding</b>	N/A	dc
<b>RF connector</b>	Reverse SMA (male)	Reverse SMA (male)
<b>Weight</b>	0.18 kg (0.30 lb.)	0.18 kg (0.4 lb.)
<b>Mounting style</b>	Ceiling T-bar, I-beam, or mast	Ceiling T-bar mount, recess T-bar spacers
<b>Front-to-back ratio (dB)</b>	N/A	N/A
<b>Dimensions (D x W x H)</b>	N/A	13.72 x 7.37 x 2.29 cm (5.4 x 2.9 x 0.9 in.)
<b>Height</b>	29.21 cm (11.5 in.)	N/A
<b>Wind surface area</b>	0.01 sq. m (0.08 sq. ft.)	N/A
<b>Wind survival</b>	201.13 km/hr (125.1 mph)	N/A
<b>Enclosure</b>	Polycarbonate	ASA
<b>Cable length</b>	0.84 m (2.75 ft.)	0.84 m (2.75 ft.)
<b>Operating temperature</b>	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)
<b>Storage temperature</b>	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Wireless Access Point 420	ProCurve Wireless Access Point 420
<b>Regulatory restrictions</b>	Not approved for use in North America with the ProCurve Wireless Access Point 520wl	Not approved for use in North America with the ProCurve Wireless Access Point 520wl

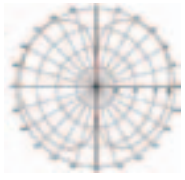
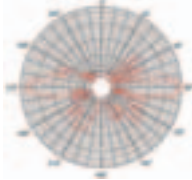
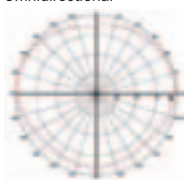
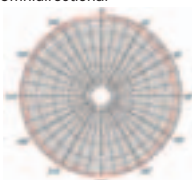
# ProCurve External Access Point Antennas



**ProCurve 3 dBi Dual Band Diversity Antenna (J8997A)**



**ProCurve 8 dBi Outdoor Omnidirectional Antenna (J8444A)**

<b>Frequency (MHz)</b>	2400–2500 (1), 4900–5990 (2)	2400–2500
<b>Gain dBi (with antenna cable)</b>	3 (1), 4 (2)	7.4
<b>VSWR max</b>	2.0:1	1.5:1
<b>E-Plane (3 dB beamwidth)</b>	60 degrees	12 degrees
		
<b>H-Plane (3 dB beamwidth)</b>	Omnidirectional	Omnidirectional
		
<b>Polarization</b>	N/A	N/A
<b>Impedance (ohms)</b>	50	50
<b>Grounding</b>	dc	N/A
<b>RF connector</b>	Reverse SMA (male)	Reverse SMA (male)
<b>Weight</b>	0.23 kg (0.5 lb.)	0.23 kg (0.5 lb.)
<b>Mounting style</b>	Ceiling grid	Mast
<b>Front-to-back ratio (dB)</b>	N/A	N/A
<b>Dimensions (D x W x H)</b>	15.65 x 9.3 x 2.26 cm (6.16 x 3.66 x 0.89 in.)	N/A
<b>Height</b>	N/A	64.14 cm (25.25 in.)
<b>Wind surface area</b>	N/A	0.01 sq. m (0.11 sq. ft.)
<b>Wind survival</b>	N/A	201.13 km/hr (125 mph)
<b>Enclosure</b>	PVC/Acrylic	Polycarbonate
<b>Cable length</b>	0.84 m (2.75 ft.)	0.84 m (2.75 ft.)
<b>Operating temperature</b>	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)
<b>Storage temperature</b>	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Access Point 530 ProCurve Radio Port 220	ProCurve Wireless Access Point 420 ProCurve Wireless Access Point 520wl
<b>Regulatory restrictions</b>	N/A	Not approved for use in North America

# ProCurve External Access Point Antennas

## Specifications

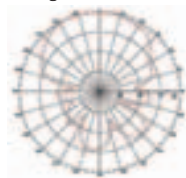
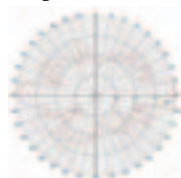


**ProCurve 6 dBi 5 GHz Omnidirectional Antenna (J8998A)**

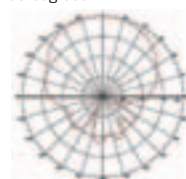
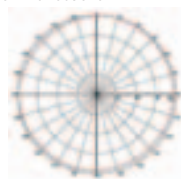


**ProCurve 7 dBi Dual Band Directional Antenna (J8999A)**

<b>Frequency (MHz)</b>	5150–5875	2400–2500 (1), 4900–5990 (2)
<b>Gain dBi (with antenna cable)</b>	6.3	6.9 (1), 7.7 (2)
<b>VSWR max</b>	2.0:1	2.0:1
<b>E-Plane (3 dB beamwidth)</b>	17 degrees	66 degrees



<b>H-Plane (3 dB beamwidth)</b>	Omnidirectional	68 degrees
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<b>Polarization</b>	Linear (vertical)	Linear (vertical)
<b>Impedance (ohms)</b>	50	50
<b>Grounding</b>	N/A	N/A
<b>RF connector</b>	Reverse SMA (male)	Reverse SMA (male)
<b>Weight</b>	0.14 kg (0.3 lb.)	0.23 kg (0.5 lb.)
<b>Mounting style</b>	Ceiling T-bar, I-beam, or mast	Flush wall mount, articulating wall, or mast
<b>Front-to-back ratio (dB)</b>	N/A	10
<b>Dimensions (D x W x H)</b>	N/A	13.11 x 13.11 x 3.48 cm (5.16 x 5.16 x 1.37 in.)
<b>Height</b>	29.36 cm (11.56 in.)	N/A
<b>Wind surface area</b>	0.01 sq. m (0.09 sq. ft.)	0.01 sq. m (0.12 sq. ft.)
<b>Wind survival</b>	193.08 km/hr (120 mph)	193.08 km/hr (120 mph)
<b>Enclosure</b>	Polycarbonate	PVC/Acrylic
<b>Cable length</b>	0.84 m (2.75 ft.)	0.84 m (2.75 ft.)
<b>Operating temperature</b>	–30°C to 55°C (–22°F to 131°F)	–30°C to 55°C (–22°F to 131°F)
<b>Storage temperature</b>	–40°C to 65°C (–40°F to 149°F)	–40°C to 65°C (–40°F to 149°F)
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Access Point 530 ProCurve Radio Port 220	ProCurve Access Point 530 ProCurve Radio Port 220
<b>Regulatory restrictions</b>	N/A	N/A

# ProCurve External Access Point Antennas



	<b>ProCurve MC-Card to R-SMA Cable (J8447A)</b>	<b>ProCurve Antenna Lightning Arrester (J8996A)</b>
<b>Frequency (MHz)</b>	2400–2500	N/A
<b>Gain dBi (with antenna cable)</b>	0.7 (loss)	N/A
<b>VSWR max</b>	1.3:1	1.4:1
<b>E-Plane (3 dB beamwidth)</b>	N/A	N/A
<b>H-Plane (3 dB beamwidth)</b>	N/A	N/A
<b>Polarization</b>	N/A	N/A
<b>Impedance (ohms)</b>	50	N/A
<b>Grounding</b>	N/A	N/A
<b>RF connector</b>	Reverse SMA (female) to R/A MC	N/A
<b>Weight</b>	N/A	N/A
<b>Mounting style</b>	N/A	N/A
<b>Front-to-back ratio (dB)</b>	N/A	N/A
<b>Dimensions (D x W x H)</b>	N/A	6.1 x 2.29 x 3.05 cm (2.4 x 0.9 x 1.2 in.)
<b>Height</b>	N/A	N/A
<b>Wind surface area</b>	N/A	N/A
<b>Wind survival</b>	N/A	N/A
<b>Enclosure</b>	N/A	N/A
<b>Cable length</b>	0.3 m (1 ft.)	N/A
<b>Operating temperature</b>	N/A	N/A
<b>Storage temperature</b>	N/A	N/A
<b>Input RF power, 100 MHz/6000 MHz</b>	N/A	250 W/10 W
<b>Insulation resistance</b>	N/A	50 Meg ohm
<b>Maximum insertion loss</b>	N/A	0.4 dB
<b>Certified for use on the following ProCurve wireless access points</b>	ProCurve Wireless Access Point 520wl	N/A
<b>Regulatory restrictions</b>	Not approved for use in North America	N/A

**For more information**

To learn more about ProCurve  
Networking, please visit  
**[www.hp.com/eur/procurve](http://www.hp.com/eur/procurve)**

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4AA0-5149EEE, 05/2006

