

**NEW** ProCurve Access Point 530

Ideal for branch or satellite office deployments, the ProCurve Access Point 530 is an intelligent edge, dual-radio access point with simultaneous support for IEEE 802.11a and IEEE 802.11g standards, as well as dual IEEE 802.11g radio operation. The 530 access point offers a comprehensive range of industry-proven user authentication methods and the latest in standards-based wireless security to assure appropriate and secure access to network resources. With built-in support for ProCurve Identity Driven Manager, the ProCurve Access Point 530 enables network administrators to reduce network operating costs by deploying a unified network that offers centralized wired and wireless network policy and device management.



**NEW** ProCurve Access Point 530 NA (J8986A)

**NEW** ProCurve Access Point 530 WW (J8987A)

# ProCurve Access Point 530

## Features and benefits

### Security

- **Choice of IEEE 802.11i, Wi-Fi Protected Access 2 (WPA2), or WPA:** locks out unauthorized wireless access by authenticating users prior to granting network access; robust Advanced Encryption Standard (AES) or Temporal Key Integrity Protocol (TKIP) encryption secures the data integrity of the wireless traffic
- **ProCurve Identity Driven Manager (IDM) security and access control:**
  - **Per-user ACLs:** permit or deny user access to specific network resources based on user identity and time of day, allowing multiple types of users (employees, visitors, temporary workforce) on the same network to access specific network services without risk to network security or unauthorized access to sensitive data
  - **Automatic VLAN assignment:** automatically assigns users to the appropriate VLAN based on their identity, community, and time of day
  - **Rate limits:** automatically applies ingress rate limits to user traffic based on identity, community, and time of day
- **IEEE 802.1X:** provides port-based user authentication with support for Extensible Authentication Protocol (EAP), TLS, TTLS, SIM, GTC, and PEAP with choice of AES, TKIP, and static or dynamic WEP encryption for protecting wireless traffic between authenticated clients and the access point
- **Neighbor access point (rogue AP) and ad-hoc wireless network detection:** Periodic scanning is provided for neighboring access points and ad-hoc wireless networks. Information collected during the scan, including BSSID, SSID, channel, RSSI, security setting, and radio type (IEEE 802.11b, b/g, or a mode) are captured for each wireless device detected. If configured, the access point can enter dedicated scan mode to provide continuous scanning of the surrounding RF environment.
- **Up to 16 BSSIDs per radio with separate VLAN, security, and authentication:** permits network administrators to control user access to network resources based on user authentication and level of trusted security between the client and access point
- **Local RADIUS authentication:** enables “enterprise-grade” 802.11i (WPA2) wireless security for small wireless LAN networks; serves as backup authentication in the event primary and secondary network RADIUS servers are unavailable due to network disruption. The local RADIUS authentication feature supports up to 100 user accounts.
- **RADIUS-based MAC authentication:** a wireless client is authenticated with a RADIUS server based on the MAC address of the client; this is useful for clients that have minimal or no user interface
- **Local MAC authentication:** deny or allow network access based on wireless client MAC address, which is compared to a database stored on the access point
- **Local wireless bridge client traffic filtering:** when enabled, prevents communication between wireless devices associated with the same access point

# ProCurve Access Point 530

## Features and benefits (continued)

- **Closed system:** restricts broadcast of SSID as a security measure to conceal presence of the wireless network; access point does not respond to the wireless client probe request of “ANY”
- **Secure Sockets Layer (SSL):** encrypts all HTTP traffic, allowing secure access to the browser-based management interface of the access point
- **Secure Shell (SSHv2):** encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- **Management VLAN:** secures management access to the access point; the management VLAN is used to manage the access point through remote management tools such as the Web interface, SSH, telnet, or SNMP
- **Management access control:** To provide more security for the access point, management interfaces that are not required can be disabled, including the Web browser, telnet, and Secure Shell (SSH), as well as the serial console port and reset button.

### Connectivity

- **Advanced dual-radio design:**
  - **Simultaneous IEEE 802.11a and IEEE 802.11g radio operation:** supports dual-band wireless clients and provides backward compatibility for IEEE 802.11b wireless devices
  - **Dual IEEE 802.11b/g radio operation:** provides high-capacity IEEE 802.11b/g data and voice wireless LAN coverage in networks where support for IEEE 802.11a is not a requirement
- **Antenna flexibility accommodates a wide range of wireless LAN deployments:**
  - **Per-radio integrated diversity antenna with omnidirectional coverage:** provides robust, dual-radio wireless LAN coverage for open office environments
  - **Per-radio external diversity antenna support:** RP-SMA antenna connectors enable external antenna configurations to extend wireless coverage or wireless bridging between access points
- **Wireless Distribution System (WDS):**
  - **Wireless bridging:** Because it expands network connectivity to remote access points located beyond a network’s wired infrastructure, wireless bridging is ideal for increasing wireless coverage to adjacent buildings, across large lecture halls, or to outdoor campus environments. Each ProCurve Access Point 530 can support up to six wireless links to remote access points. WPA-PSK encryption secures data on each wireless link. Wireless distribution is supported on IEEE 802.11a, b, and g radio modes of operation.
  - **Single-radio operation:** A wireless link is provided to each remote ProCurve Access Point 530; it also services local wireless clients.
  - **Dual-radio operation:** One radio provides a wireless link to each remote ProCurve Access Point 530. The second radio provides network connectivity to local wireless clients.
- **IEEE 802.11h International Telecommunication Union (ITU) compliant:** employs Dynamic Frequency Selection (DFS) and Transmit Power Control (TCP) to automatically select another channel and adjust transmit power to minimize interference with systems such as radar, if detected on that same channel

# ProCurve Access Point 530

- **International country configuration:** select the appropriate country, and the access point will automatically configure operation to match regulatory requirements
- **Auto Channel Select (ACS):** helps minimize radio co-channel interference by automatically selecting an unoccupied radio channel
- **Adjustable output power:** controls cell size for high-density access point deployments
- **IEEE 802.3af Power over Ethernet support:** simplifies deployment and dramatically reduces installation costs by helping to eliminate the time and cost involved in supplying local power at each access point location
- **Link Layer Discovery Protocol (LLDP):** enables real-time mapping of nodes to switch ports; LLDP (IEEE 802.1AB) industry-standard discovery protocol automatically populates both the LLDP and proprietary discovery MIBs for net management systems dependent on these MIBs
- **Multiple configuration files:** multiple config files can be stored to flash image
- **SCP (Secure Copy Protocol):** allows secure file transfer to/from the access point; protects against unwanted file downloads or unauthorized copying of switch configuration file
- **Network management:**
  - **ProCurve Identity Driven Manager (IDM):** This software extends the functionality of ProCurve Manager Plus to include authorization control features for the ProCurve Access Point 530 and ProCurve switches using RADIUS servers and MAC authentication or IEEE 802.1X security protocols. IDM provides the ability to create and assign access rights, quality of service, and VLAN enrollment that is dynamically associated with a user and applied at the point of entry or “edge” of the network.
  - **ProCurve Mobility Manager 1.0:** This software provides a simple yet powerful management tool to centrally configure, update, monitor, and troubleshoot ProCurve APs, such as the ProCurve Access Point 530. It expands the capabilities of ProCurve Manager Plus to address mobility-specific device management. Advanced capabilities include rogue device detection, group-based configuration and firmware updates, monitoring wireless client association activity, and e-mail/pager alerts.

## Quality of Service (QoS)

- **Wi-Fi WMM support:** provides QoS functionality in wireless networks by prioritizing wireless traffic from different applications
- **SpectraLink voice priority (SVP) support:** prioritizes SpectraLink voice IP packets sent from a SpectraLink NetLink SVP server to SpectraLink wireless voice handsets to help ensure excellent voice quality

## Management

- **Remote configuration and management:** through secure Web browser or command-line interface (CLI)
- **RADIUS accounting support:** separate RADIUS accounting server support per BSSID provides detailed session, usage, and billing information for each client activity

## Industry-leading warranty

- **Lifetime warranty:** for as long as you own the product, with next-business-day advance replacement (available in most countries)

## Industry certifications

- Visit [www.procurve.com](http://www.procurve.com) for an up-to-date list of industry certifications.

# ProCurve Access Point 530

## Services

### **ProCurve Access Point 530 NA**

- 3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E)

### **ProCurve Access Point 530 WW**

- 3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E)

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.

# ProCurve Access Point 530

## Specifications



**ProCurve Access Point 530 NA (J8986A)**



**ProCurve Access Point 530 WW (J8987A)**

<b>Ports</b>	1 10/100 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 1 RS-232C DB-9 console port	1 10/100 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 1 RS-232C DB-9 console port
<b>Physical characteristic</b>		
Dimensions (D x W x H)	6.8 x 9.8 x 1.2 in. (17.27 x 21.83 x 3.05 cm)	6.8 x 9.8 x 1.2 in. (17.27 x 21.83 x 3.05 cm)
Weight	1.6 lb. (0.73 kg), including mounting bracket	1.6 lb. (0.73 kg), including mounting bracket
<b>Memory and processor</b>		
Processor type and speed	PowerPC MPC8248 @ 400 MHz	PowerPC MPC8248 @ 400 MHz
SDRAM	32 MB	32 MB
Flash ROM	16 MB	16 MB
<b>Mounting</b>	Ceiling mount to suspended ceiling T-bar, or wall mount	
<b>Environment</b>		
Operating temperature	32°F to 122°F (0°C to 50°C); PoE mode	32°F to 122°F (0°C to 50°C); PoE mode
Operating relative humidity	5% to 95%, non-condensing	5% to 95%, non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	5% to 95%, non-condensing	5% to 95%, non-condensing
Altitude	Up to 10,000 ft. (3 km)	Up to 10,000 ft. (3 km)
<b>Web interface</b>	Microsoft® Internet Explorer 5.5 or higher	
<b>Electrical characteristics</b>		
Voltage	48 VDC (PoE)	48 VDC (PoE)
Maximum heat dissipation	43 BTU/hr	43 BTU/hr
Current	0.260 A	0.260 A
Power consumption	12.5 W	12.5 W
<b>Safety</b>	UL 2043; UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1
<b>Emissions</b>	EN 60601-1-2; EN 301 489-1; EN 301 489-17; FCC Part 15.107; FCC Part 15.109; ICES-003 Class B	
<b>RF exposure</b>	FCC Bulletin OET-65C; IEEE C95.1; RSS-102	IEEE C95.1
<b>Radio</b>	FCC Part 15.247; FCC Part 15.407 (U.S.); RSS-210 (Canada); EN 300 328; EN 301 893 (Europe); ARIB STD-T66; ARIB STD-T71; ARIB STD-33	

### J8986A ProCurve Access Point 530

#### Radio characteristics: IEEE 802.11b

Data rate	11 Mbps	5.5 Mbps	2 Mbps	1 Mbps
Receiver sensitivity	-88 dBm	-91 dBm	-92 dBm	-96 dBm
Transmit power	24 dBm	24 dBm	24 dBm	24 dBm

#### Radio characteristics: IEEE 802.11g

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-74 dBm	-75 dBm	-80 dBm	-83 dBm	-87 dBm	-88 dBm	-89 dBm	-90 dBm
Transmit power	23.5 dBm	23.5 dBm	23.5 dBm	23.5 dBm	23.5 dBm	23.5 dBm	23.5 dBm	23.5 dBm

#### Radio characteristics: IEEE 802.11a

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-70 dBm	-72 dBm	-78 dBm	-82 dBm	-85 dBm	-87 dBm	-89 dBm	-90 dBm
Transmit power	22 dBm	23 dBm	23 dBm	23 dBm	23 dBm	23 dBm	23 dBm	23 dBm

# ProCurve Access Point 530

## Specifications



ProCurve Access Point 530 NA (J8986A)



ProCurve Access Point 530 WW (J8987A)

### J8987A ProCurve Access Point 530

#### Radio characteristics: IEEE 802.11b

Data rate	11 Mbps	5.5 Mbps	2 Mbps	1 Mbps
Receiver sensitivity	-89 dBm	-91 dBm	-93 dBm	-96 dBm
Transmit power	17.5 dBm	17.5 dBm	17.5 dBm	17.5 dBm

#### Radio characteristics: IEEE 802.11g

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-73 dBm	-76 dBm	-80 dBm	-83 dBm	-87 dBm	-89 dBm	-90 dBm	-91 dBm
Transmit power	19 dBm	19 dBm	19 dBm	19 dBm	19 dBm	19 dBm	19 dBm	19 dBm

#### Radio characteristics: IEEE 802.11a

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-70 dBm	-72 dBm	-79 dBm	-82 dBm	-85 dBm	-88 dBm	-90 dBm	-91 dBm
Transmit power	22 dBm	23 dBm	24 dBm	24 dBm	24 dBm	24 dBm	24 dBm	24 dBm

#### Frequency band and operating channels

Australia	N/A	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)
China	N/A	2.412–2.472 GHz (13 channels) 5.725–5.825 GHz (4 channels)
European Union	N/A	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.470–5.725 GHz (11 channels)
FCC (U.S. & Canada)	2.412–2.462 GHz (11 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)	N/A
Japan	N/A	2.412–2.484 GHz (14 channels) 5.150–5.350 GHz (8 channels)
Korea	N/A	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.470–5.650 GHz (8 channels) 5.725–5.825 GHz (4 channels)
Mexico	2.412–2.462 GHz (11 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)	N/A
Singapore	N/A	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)
Taiwan	2.412–2.462 GHz (11 channels) 5.250–5.350 GHz (4 channels) 5.725–5.825 GHz (4 channels)	N/A

#### Management

ProCurve Manager Plus; ProCurve Manager; command-line interface; Web browser; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB

#### Standards and protocols

RFC 1350 TFTP Protocol Revision 2; RFC 854 Telnet; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 1305 NTPv3; RFC 1157 A Simple Network Management Protocol (SNMP); IEEE 802.1D Spanning Tree; IEEE 802.11a High Speed Physical Layer in the 5 GHz Band; IEEE 802.11b Higher-Speed Physical Layer Extension in the 2.4 GHz Band; IEEE 802.11g Further Higher Data Rate Extension in the 2.4 GHz Band; RFC 2138 RADIUS; RFC 2865 Remote Authentication Dial In User Service (RADIUS); RFC 2866 RADIUS accounting; SSHv2 Secure Shell; IEEE 802.1X Network Login; IEEE 802.11i Medium Access Control (MAC) Security Enhancements; RFC 2104 Keyed-Hashing for Message Authentication; RFC 2459 Internet X.509 Public Key Infrastructure Certificate and CRL Profile; RFC 2868 RADIUS Attributes for Tunnel Protocol Support; RFC 2548 Microsoft Vendor-specific RADIUS Attributes; RFC 2869 RADIUS Extensions; RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP); RFC 2716 PPP EAP TLS Authentication Protocol; RFC 3394 Advanced Encryption Standard (AES) Key Wrap Algorithm; IEEE 802.3af Power over Ethernet; IEEE 802.1Q VLAN tagging; SNMPv1/v2; RFC 2233 The Interfaces Group MIB using SMIPv2; RFC 3418 MIB for SNMP; HTML and telnet management; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 3164 Syslog; RFC 791 IP; RFC 894 IP over Ethernet; RFC 1042 Transmission of IP Datagrams over IEEE 802 Networks; RFC 1541 DHCP; RFC 1945 Hypertext Transfer Protocol—HTTP/1.0; RFC 2818 HTTP Over TLS; RFC 1321 The MD5 Message-Digest Algorithm

# ProCurve Access Point 530 Accessories



## ProCurve 5 dBi Indoor/Outdoor Omnidirectional Antenna (J8441A)

5 dBi indoor/outdoor high-gain omnidirectional antenna with ceiling T-bar, I-beam, and mast mount

### Electrical characteristics

Frequency range 1 (MHz): 2400–2500  
Gain 1 dBi (with antenna cable): 4.4  
VSWR max.: 1.7:1  
E-Plane (3 dB beamwidth): 31 degrees  
H-Plane (3 dB beamwidth): omnidirectional  
Polarization: linear (vertical)  
Impedance (ohms): 50  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.30 lb. (0.14 kg)  
Height: 11.5 in. (29.21 cm)  
Mounting style: ceiling T-bar, I-beam, or mast

### Environment

Wind surface area: 0.08 ft. (0.01 m)  
Wind survival: 125.1 mph (201.13 km/hr)  
Enclosure: polycarbonate  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



## ProCurve 8 dBi Outdoor Omnidirectional Antenna (J8444A)

8 dBi outdoor omnidirectional antenna

### Electrical characteristics

Frequency range 1 (MHz): 2400–2500  
Gain 1 dBi (with antenna cable): 7.4  
VSWR max.: 1.5:1  
E-Plane (3 dB beamwidth): 12 degrees  
H-Plane (3 dB beamwidth): omnidirectional  
Polarization: linear (vertical)  
Impedance (ohms): 50  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.5 lb. (0.23 kg)  
Mounting style: mast  
Height: 25.25 in. (64.14 cm)

### Environment

Wind surface area: 0.11 ft. (0.01 m)  
Wind survival: 125 mph (201.13 km/hr)  
Enclosure: polycarbonate  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



## ProCurve 14 dBi Yagi Antenna (J8448B)

14 dBi yagi antenna enables extended 2.4 GHz point-to-point wireless LAN links between ProCurve access points

### Electrical characteristics

Frequency range 1 (MHz): 2400–2500  
Gain 1 dBi (with antenna cable): 13.8  
VSWR max.: 1.7:1  
E-Plane (3 dB beamwidth): 30 degrees  
H-Plane (3 dB beamwidth): 34 degrees  
Impedance (ohms): 50  
RF connector: N-type (female)

### Physical characteristics

Weight: 1.25 lb. (0.57 kg)  
Mounting style: wall or mast mount  
Front-to-back ratio (dB): 18  
Dimensions (D x W x H): 26.5 x 3.75 x 1.5 in. (67.31 x 9.53 x 3.81 cm)

### Environment

Wind surface area: 0.70 ft. (0.07 m)  
Wind survival: 100 mph (160.9 km/hr)  
Enclosure: polycarbonate  
Cable length: 1.7 ft. (0.52 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



## ProCurve Antenna Lightning Arrester (J8996A)

helps protect access points from damage upon lightning strike to an outdoor access point antenna

### Electrical characteristics

VSWR max.: 1.4:1

### Physical characteristics

Dimensions (D x W x H): 2.4 x 0.9 x 1.2 in. (6.1 x 2.29 x 3.05 cm)

### Notes

Input RF power, 100 MHz/6000 MHz: 250 W/10 W  
Insulation resistance: 50 Meg ohm  
Maximum insertion loss: 0.4 dB

Services for accessories are covered under the product in which they are installed.

# ProCurve Access Point 530 Accessories



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

3 dBi multi-band diversity ceiling-mount antenna

### Electrical characteristics

Frequency range 1 (MHz): 2400–2500  
Gain 1 dBi (with antenna cable): 3  
Frequency range 2 (MHz): 4900–5990  
Gain 2 dBi (with antenna cable): 4  
VSWR max.: 2.0:1  
E-Plane (3 dB beamwidth): 60 degrees  
H-Plane (3 dB beamwidth): omnidirectional  
Impedance (ohms): 50  
Grounding: dc  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.5 lb. (0.23 kg)  
Mounting style: ceiling grid  
Dimensions (D x W x H): 6.16 x 3.66 x 0.89 in. (15.65 x 9.3 x 2.26 cm)

### Environment

Enclosure: PVC/acrylic  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



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

5 GHz omnidirectional antenna provides high gain performance for IEEE 802.11a radio of either the ProCurve Access Point 530 or Radio Port 220

### Electrical characteristics

Frequency range 1 (MHz): 5150–5875  
Gain 1 dBi (with antenna cable): 6.3  
VSWR max.: 2.0:1  
E-Plane (3 dB beamwidth): 17 degrees  
H-Plane (3 dB beamwidth): omnidirectional  
Polarization: linear (vertical)  
Impedance (ohms): 50  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.3 lb. (0.14 kg)  
Mounting style: ceiling T-bar, I-beam, or mast  
Height: 11.56 in. (29.36 cm)

### Environment

Wind surface area: 0.09 ft. (0.01 m)  
Wind survival: 120 mph (193.08 km/hr)  
Enclosure: polycarbonate  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



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

7 dBi multi-band directional antenna for use with 2.4 GHz or 5 GHz radios of the ProCurve Access Point 530 or Radio Port 220

### Electrical characteristics

Frequency range 1 (MHz): 2400–2500  
Gain 1 dBi (with antenna cable): 6.9  
Frequency range 2 (MHz): 4900–5990  
Gain 2 dBi (with antenna cable): 7.7  
VSWR max.: 2.0:1  
E-Plane (3 dB beamwidth): 66 degrees  
H-Plane (3 dB beamwidth): 68 degrees  
Polarization: linear (vertical)  
Front-to-back ratio: 10 dB  
Impedance (ohms): 50  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.5 lb. (0.23 kg)  
Mounting style: flush wall mount, articulating wall, or mast  
Dimensions (D x W x H): 5.16 x 5.16 x 1.37 in. (13.11 x 13.11 x 3.48 cm)

### Environment

Wind surface area: 0.12 ft. (0.01 m)  
Wind survival: 120 mph (193.08 km/hr)  
Enclosure: PVC/acrylic  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)



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

indoor/outdoor 14 dBi 5 GHz wide-band, high-gain directional antenna extends IEEE 802.11a coverage for point-to-point or point-to-multi-point wireless bridging

### Electrical characteristics

Frequency range 1 (MHz): 5150–5875  
Gain 1 dBi (with antenna cable): 13.3  
VSWR max.: 2.0:1  
E-Plane (3 dB beamwidth): 27 degrees  
H-Plane (3 dB beamwidth): 29 degrees  
Polarization: linear (vertical)  
Impedance (ohms): 50  
Grounding: dc  
RF connector: reverse SMA (male)

### Physical characteristics

Weight: 0.7 lb. (0.32 kg)  
Mounting style: flush wall mount, articulating wall, or mast  
Front-to-back ratio (dB): 17  
Dimensions (D x W x H): 4.16 x 4.16 x 1.37 in. (10.57 x 10.57 x 3.48 cm)

### Environment

Wind surface area: 0.12 ft. (0.01 m)  
Wind survival: 120 mph (193.08 km/hr)  
Enclosure: PVC/acrylic  
Cable length: 2.75 ft. (0.84 m)  
Operating temperature: –22° to 131°F (–30° to 55°C)  
Storage temperature: –40° to 149°F (–40° to 65°C)

Services for accessories are covered under the product in which they are installed.

**For more information**

To learn more about ProCurve  
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**[www.procurve.com](http://www.procurve.com)**

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