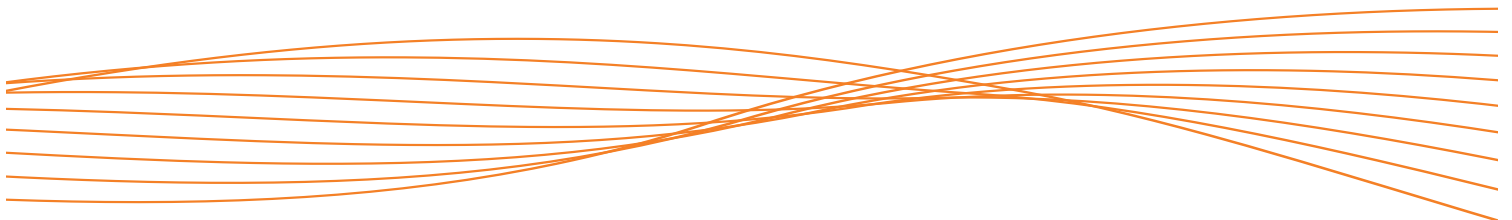


## ProCurve Access Point 530

Ideal for branch or satellite office deployments, the ProCurve Access Point 530 is an intelligent edge, dual-radio access point with simultaneous support for 802.11a and 802.11g standards, as well as dual 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.



ProCurve Access Point 530 (J8987A)



# ProCurve Access Point 530

## Features and benefits

### Management

**NEW Wireless sFlow support:** With the addition of sFlow sampling of wireless traffic, management applications such as ProCurve Manager Plus or other wireless sFlow-capable network analyzers enable unified network visibility into traffic metrics, including wired and wireless network top talkers, top applications, and network connections. Wireless sFlow, when used with ProCurve Network Immunity Manager, provides rapid identification and response to specific network threats on wired and wireless network connections.

**NEW Group configuration:** simplifies deployment of configuration updates to many access points in the same subnet. An administrator can securely manage up to twelve access points using SNMP, the browser, or the CLI interface of one member of the group. Each configuration change is securely communicated to other members of the group. New members added to the configuration group automatically receive the latest configuration from a peer within the group.

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

### 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
- **NEW Adaptive Transmit Power Control:** The ProCurve Access Point 530 continuously monitors and automatically adjusts beacon or data transmit power to minimize same-channel interference while maximizing channel coverage.
- **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

# ProCurve Access Point 530

## Features and benefits (continued)

- **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 (TPC) to automatically select another channel and adjust transmit power to minimize interference with systems such as radar, if detected on that same channel

- **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

### Security

- **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
- **Access point authentication:** enables secure authentication of the ProCurve Access Point 530 on network ports protected by 802.1X port-based authentication
- **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 Access Point 530

- **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
- **NEW Web authentication:** provides authentication for browser-based wireless clients. Built-in login, welcome, and failure Web pages assist users through the login process.
- **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
- **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
- **NEW MAC address lockdown:** prevents configured particular MAC addresses from connecting to the network
- **Local wireless bridge client traffic filtering:** when enabled, prevents communication between wireless devices associated with the same 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), is 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.
- **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 management access:** all access methods—CLI, GUI, or MIB—are securely encrypted through SSHv2, SSL, and/or SNMPv3

# ProCurve Access Point 530

## Features and benefits (continued)

- **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.

### 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

### Industry-leading warranty

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

## Services

### ProCurve Access Point 530

- 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)
- 3-year, 24x7 software phone support, software updates (UF792E)

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 (J8987A)**

<b>Ports</b>	1 auto-sensing 10/100 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) Media type: ProCurve Auto-MDIX Duplex: half or full 1 RS-232C DB-9 console port
<b>Physical characteristic</b>	
Dimensions (D x W x H)	17.27 x 21.83 x 3.05 cm (6.8 x 9.8 x 1.2 in.)
Weight	0.73 kg (1.6 lb.), including mounting bracket
<b>Memory and processor</b>	
Processor type and speed	PowerPC MPC8248 @ 400 MHz
SDRAM	32 MB
Flash ROM	16 MB
<b>Mounting</b>	Ceiling mount to suspended ceiling T-bar, or wall mount
<b>Environment</b>	
Operating temperature	0°C to 50°C (32°F to 122°F); PoE mode
Operating relative humidity	5% to 95%, non-condensing
Non-operating/Storage temperature	-40°C to 70°C (-40°F to 158°F)
Non-operating/Storage relative humidity	5% to 95%, non-condensing
Altitude	Up to 3 km (10,000 ft.)
<b>Web interface</b>	Microsoft® Internet Explorer 5.5 or higher
<b>Electrical characteristics</b>	
Voltage	48 VDC (PoE)
Maximum heat dissipation	45 kJ/hr (43 BTU/hr)
Current	0.260 A
Power consumption	12.5 W
<b>Frequency band and operating channels</b>	
FCC (U.S.)	N/A
Canada	N/A
Mexico	N/A
Taiwan	N/A
European Union	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.470–5.725 GHz (11 channels)
Japan	2.412–2.484 GHz (14 channels) 5.150–5.350 GHz (8 channels)
China	2.412–2.472 GHz (13 channels) 5.725–5.825 GHz (4 channels)
Singapore	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)
Korea	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)
Australia	2.412–2.472 GHz (13 channels) 5.150–5.350 GHz (8 channels) 5.725–5.825 GHz (4 channels)

# ProCurve Access Point 530

## Specifications (continued)



### ProCurve Access Point 530 (J8987A)

<b>Radio</b>	EN 300 328; EN 301 893 (Europe); ARIB STD-T66; ARIB STD-T71; ARIB STD-33
<b>Safety</b>	UL 2043 (J8986A only); 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>	IEEE C95.1
<b>Management</b>	ProCurve Manager Plus; ProCurve Manager; command-line interface; Web browser; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB

### ProCurve Access Point 530 (J8987A)

#### 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

#### Standards and protocols

##### Device management

RFC 1305 NTPv3  
RFC 1945 Hypertext Transfer Protocol—  
HTTP/1.0  
HTML and telnet management

##### General protocols

IEEE 802.1D MAC Bridges  
IEEE 802.1Q VLANs  
IEEE 802.3af Power over Ethernet  
RFC 768 UDP  
RFC 791 IP  
RFC 792 ICMP  
RFC 793 TCP  
RFC 826 ARP  
RFC 854 TELNET  
RFC 894 IP over Ethernet  
RFC 1042 IP Datagrams  
RFC 1350 TFTP Protocol (revision 2)  
RFC 1541 DHCP

##### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2233 Interface MIB  
RFC 3418 MIB for SNMPv3

##### Mobility

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  
IEEE 802.11i Medium Access Control (MAC)  
Security Enhancements

##### Network management

RFC 1157 SNMPv1  
RFC 3164 BSD syslog Protocol  
SNMPv1/v2c/v3

##### Security

IEEE 802.1X Port Based Network Access  
Control  
RFC 1321 The MD5 Message-Digest Algorithm  
RFC 2104 Keyed-Hashing for Message  
Authentication  
RFC 2138 RADIUS Authentication  
RFC 2459 Internet X.509 Public Key  
Infrastructure Certificate and CRL Profile  
RFC 2548 Microsoft Vendor-specific RADIUS  
Attributes  
RFC 2716 PPP EAP TLS Authentication Protocol  
RFC 2818 HTTP Over TLS  
RFC 2865 RADIUS Authentication  
RFC 2866 RADIUS Accounting  
RFC 2868 RADIUS Attributes for Tunnel  
Protocol Support  
RFC 2869 RADIUS Extensions  
RFC 3394 Advanced Encryption Standard  
(AES) Key Wrap Algorithm  
RFC 3579 RADIUS Support For Extensible  
Authentication Protocol (EAP)  
SSHv2 Secure Shell

# 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

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

8 dBi outdoor omnidirectional antenna

### **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

### **ProCurve Antenna Lightning Arrester (J8996A)**

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

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

3 dBi multi-band diversity ceiling-mount antenna

### **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

### **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

### **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

**For more information**

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

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