

## ProCurve Wireless Access Point 420

The ProCurve Wireless Access Point 420 is a full-featured IEEE 802.11g, single-radio access point ideally suited for medium to large wireless LAN deployments. Offering the latest standards-based security--including support for IEEE 802.11i, WPA2, and WPA--combined with multiple SSID, access point (rogue AP), and wireless ad-hoc network detection, the ProCurve Access Point 420 delivers choice and flexibility to address wireless access to network services without compromising network security.



ProCurve Wireless Access  
Point 420 WW (J8131A)



ProCurve Wireless Access  
Point 420 NA (J8130A)

# ProCurve Wireless Access Point 420

## Features and benefits

### Mobility

- **IEEE 802.11g single-radio design:** provides choice for support of IEEE 802.11g and legacy IEEE 802.11b wireless clients with selection of three radio modes of operation: IEEE 802.11b, 802.11g, or 802.11g with fallback support for 802.11b
- **Detachable antenna design:** enables use of external antenna configurations for improved radio coverage and performance
- **Adjustable output power:** controls cell size for high-density access point deployments
- **Interoperability:** Wi-Fi Alliance certifications including IEEE 802.11g Wi-Fi and WPA2 to help ensure multivendor interoperability

### Management

- **Network management:** ProCurve Mobility Manager is a simple yet powerful management tool to centrally configure, update, monitor, and troubleshoot ProCurve access points, including the ProCurve Wireless Access Point 420. ProCurve Mobility Manager expands the capabilities of ProCurve Manager Plus to address mobility-specific management concerns, while also taking a holistic approach to managing both wired and wireless portions of the network. Advanced capabilities include rogue device detection, group-based configuration and firmware updates, customizable quick-view screens, monitoring of wireless client association activity, and e-mail/pager alerts.
- **Remote configuration and management:** through secure Web browser or command-line interface (CLI)
- **Management interface control:** each of the following interfaces can be enabled or disabled depending on security preferences: console port, telnet port, reset button
- **Manager, operator privilege levels:** enables read-only (operator) and read-write (manager)

access on CLI and Web browser management interfaces

- **Management VLAN:** segments traffic to and from management interfaces, including CLI/telnet, Web browser interface, and SNMP
- **RADIUS accounting support:** separate RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- **International country configuration:** select the appropriate country, and the access point automatically configures operation to match regulatory requirements (model J8131A only)
- **Local wireless bridge client traffic filtering:** when enabled, prevents communication between wireless devices associated with the same access point

### 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
- **IEEE 802.1X:** provides port-based user authentication with support for Extensible Authentication Protocol (EAP) MD-5, TLS, TTLS, and PEAP with choice of AES, TKIP, and static or dynamic WEP encryption for protecting wireless traffic between authenticated clients and the access point
- **8 SSIDs with separate VLAN, security, and authentication per SSID:** permits network administrators to control user access to network resources based on user authentication and level of trusted security between the wireless user and the access point. For example, the SSID labeled "GUEST" requires no authentication or security for users of this SSID. All traffic on the "GUEST" SSID is placed on a VLAN with restricted access to specific services such as Internet access. A second SSID is configured for

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employee access. The "EMPLOYEE" SSID requires successful authentication to the network using IEEE 802.11i with AES encryption to protect wireless data. The VLAN associated with the "EMPLOYEE" SSID grants access to a broader range of services and network access.

- **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
- **Secure access to management interfaces:** all management interfaces of the ProCurve Access Point 420--CLI, browser interface, or MIB--are securely encrypted through SSHv2, SSL, and SNMPv3
- **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"
- **Access Point (rogue AP) and ad-hoc wireless network detection:** each ProCurve Access Point 420 can be configured to periodically scan for neighboring access points and ad-hoc wireless networks. Information collected during the scan--including the BSSID, SSID, channel, RSSI, security setting, and radio type (IEEE 802.11b, g, or b/g mode)--are captured for each access point detected. If configured, the access point can enter dedicated scan mode to provide continuous scanning of the surrounding RF environment.

## Convergence

- **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
- **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

## 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 Wireless Access Point 420 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)
- 3-year, 24x7 SW phone support, software updates (UF792E)

### ProCurve Wireless Access Point 420 NA

- 3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)
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# ProCurve Wireless Access Point 420



**ProCurve Wireless Access Point 420 WW (J8131A)**



**ProCurve Wireless Access Point 420 NA (J8130A)**

## Specifications

Ports	ProCurve Wireless Access Point 420 WW (J8131A)	ProCurve Wireless Access Point 420 NA (J8130A)
<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	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 Characteristics</b>		
Dimensions	8.59(d) x 5.41(w) x 1.29(h) in. (21.82 x 13.74 x 3.28 cm)	8.59(d) x 5.41(w) x 1.29(h) in. (21.82 x 13.74 x 3.28 cm)
Weight	2.27 lb. (1.02 kg)mounting bracket	2.27 lb. (1.02 kg)mounting bracket
<b>Memory and Processor</b>	4 MB flash	4 MB flash
<b>Mounting</b>	Includes wall-mounting bracket and related hardware	Includes wall-mounting bracket and related hardware
<b>Environment</b>		
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	15% to 95%, non-condensing	15% 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	0% to 95%, non-condensing	0% to 95%, non-condensing
<b>Wireless Interface</b>	Microsoft Internet Explorer 5.5 or higher; Netscape Navigator 6.0 or higher	Microsoft Internet Explorer 5.5 or higher; Netscape Navigator 6.0 or higher
<b>Electrical Characteristics</b>		
Description	Voltage: 48 VDC (PoE)	Voltage: 48 VDC (PoE)
Max heat dissipation	102 BTU/hr(107.61 kJ/hr)	102 BTU/hr(107.61 kJ/hr)
Current	0.4 A	0.4 A
Power consumption	13.2 W	13.2 W
<b>Radio</b>	FCC Part 15.247; IC RSS 210; EN 300-328-1; EN 300-328-2; ARIB STD-T66; ARIB STD-33	FCC Part 15.247; IC RSS 210; EN 300-328-1; EN 300-328-2; ARIB STD-T66; ARIB STD-33
<b>Safety</b>	EN 60950/IEC 60950; UL 2043; UL 60950	EN 60950/IEC 60950; UL 2043; UL 60950
<b>Emission</b>	EN55022 Class B; AS/NZS 3548 Class B; FCC Part 15.107; ICES-003 Class B; FCC Part 15.109 Class B	EN55022 Class B; AS/NZS 3548 Class B; FCC Part 15.107; ICES-003 Class B; FCC Part 15.109 Class B
<b>Immunity</b>	EN 55024, CISPR 24	EN55024, CISPR 24
<b>Features</b>		

# ProCurve Wireless Access Point 420

## Hardware

- Hardware reset button
- External antenna connectors (RP-SMA)
- Antenna diversity support
- Plenum rating (UL 2043 rating)
- Kensington security slot
- RS-232 DB-9 serial console port
- Status LEDs
- Wall mount hardware
- Local DC power input or 802.3af Power over Ethernet
- 10/100 Ethernet port (IEEE 802.3 Type 10Base-T, 802.3u Type 100Base-TX)

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### ProCurve Wireless Access Point 420 WW (J8131A)

#### Radio characteristics: 802.11g

Modulation: Orthogonal Frequency Division Modulation (64 QAM, 16 QAM, QPSK, BPSK)

Media access protocol: CSMA/CA (Collision Avoidance) with ACK

Nominal output power: 15 dBm

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-70 dBi	-73 dBi	-75 dBi	-80 dBi			-82 dBi	-85 dBi

Transmit power

### ProCurve Wireless Access Point 420 NA (J8130A)

#### Radio characteristics: 802.11g

Modulation: Orthogonal Frequency Division Modulation (64 QAM, 16 QAM, QPSK, BPSK)

Media access protocol: CSMA/CA (Collision Avoidance) with ACK

Nominal output power: 15 dBm

Data rate	54 Mbps	48 Mbps	36 Mbps	24 Mbps	18 Mbps	12 Mbps	9 Mbps	6 Mbps
Receiver sensitivity	-70 dBi	-73 dBi	-75 dBi	-80 dBi			-82 dBi	-85 dBi

Transmit power

# ProCurve Wireless Access Point 420

## Standards and Protocols

### Device Management

RFC 2068 Hypertext Transfer Protocol -- HTTP/1.1  
HTML and telnet management

### General Protocols

IEEE 802.1Q VLANs  
IEEE 802.3af Power over Ethernet  
RFC 768 UDP  
RFC 783 TFTP Protocol (revision 2)  
RFC 791 IP  
RFC 792 ICMP  
RFC 793 TCP  
RFC 826 ARP  
RFC 854 TELNET  
RFC 894 IP over Ethernet

RFC 1541 DHCP  
RFC 2030 Simple Network Time Protocol (SNTP) v4

### MIBs

RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 2011 SNMPv2 MIB for IP  
RFC 2012 SNMPv2 MIB for TCP

### Mobility

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 3164 BSD syslog Protocol  
SNMPv1/v2c/v3

### Security

IEEE 802.1X Port Based Network Access Control  
RFC 2138 RADIUS Authentication Secure Sockets Layer (SSL)  
SSHv2 Secure Shell  
RFC 2866 RADIUS Accounting

# ProCurve Wireless Access Point 420

## Accessories

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### External Antenna

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#### **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: 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)  
Cable length: 2.75 ft. (0.84 cm)

#### **Physical Characteristics**

Dimensions: 11.5(h) in. (29.21 cm)

Wind surface area: 0.08 sq. ft. (0.01 sq. m)  
Wind survival: 125.1 mph (201.13 km/hr)  
Weight: 0.30 lb. (0.14 kg)  
Mounting style: Ceiling T-bar, I-beam, or mast  
Enclosure: Polycarbonate

#### **Environment**

Operating temperature: -22°F to 131°F (-30°C to 55°C)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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#### **ProCurve 2 dBi Indoor Omnidirectional Diversity Antenna (J8442A)**

2 dBi indoor omnidirectional diversity ceiling-mount antenna with ceiling T-bar mount and recess T-bar spacers

#### **Electrical Characteristics**

Frequency range 1: 2400 - 2500  
Gain 1 dBi (with antenna cable): 1.4  
VSWR max: 1.7:1  
E-Plane (3 dB beamwidth): 80 degrees  
H-Plane (3 dB beamwidth):  
Omnidirectional  
Polarization: Linear  
Impedance (Ohms): 50  
Grounding: DC  
RF connector: Reverse SMA (male)  
Cable length: 2.75 ft. (0.84 cm)

#### **Physical Characteristics**

Dimensions: 5.4(d) x 2.9(w) x 0.9(h) in. (13.72 x 7.37 x 2.29 cm)  
Weight: 0.4 lb. (0.18 kg)  
Mounting style: Ceiling T-bar mount, recess T-bar spacers  
Enclosure: ASA

#### **Environment**

Operating temperature: -22°F to 131°F (-30°C to 55°C)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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

7 dBi indoor/outdoor high-gain directional antenna with flush wall, articulating wall, and mast mount

#### **Electrical Characteristics**

Frequency range 1: 2400 - 2500  
Gain 1 dBi (with antenna cable): 6.7  
VSWR max: 1.7:1  
E-Plane (3 dB beamwidth): 50 degrees  
H-Plane (3 dB beamwidth): 65 degrees  
Polarization: Linear (vertical)  
Impedance (Ohms): 50  
RF connector: Reverse SMA (male)  
Cable length: 2.75 ft. (0.84 cm)

#### **Physical Characteristics**

Dimensions: 4.6(d) x 3.8(w) x 1.2(h) in.

(11.68 x 9.65 x 3.05 cm)  
Weight: 0.5 lb. (0.23 kg)  
Mounting style: Flush wall mount, articulating wall, or mast  
Enclosure: UV stable PVC  
Front-to-back ratio (dB): 12

#### **Environment**

Operating temperature: -22°F to 131°F (-30°C to 55°C)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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

8 dBi outdoor omnidirectional antenna

#### **Electrical Characteristics**

Frequency range 1: 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)  
Cable length: 2.75 ft. (0.84 cm)

#### **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)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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External Antenna

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

6.5 dBi indoor/outdoor directional diversity antenna with flush wall, articulating wall, and mast mount

**Electrical Characteristics**

Frequency range 1: 2400 - 2500  
Gain 1 dBi (with antenna cable): 6.4  
VSWR max: 1.7:1  
E-Plane (3 dB beamwidth): 55 degrees  
H-Plane (3 dB beamwidth): 80 degrees  
Polarization: Linear (vertical)  
Impedance (Ohms): 50  
Grounding: DC  
RF connector: Reverse SMA (male)  
Cable length: 2.75 ft. (0.84 cm)

**Physical Characteristics**

Dimensions: 6.7(d) x 4.75(w) x 0.84(h)

in. (17.02 x 12.07 x 2.13 cm)  
Weight: 0.6 lb. (0.27 kg)  
Mounting style: Flush wall mount, articulating wall, or mast  
Enclosure: ASA  
Front-to-back ratio (dB): 15

**Environment**

Operating temperature: -22°F to 131°F (-30°C to 55°C)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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

11 dBi indoor/outdoor wide-angle directional antenna with flush wall, articulating wall, and mast mount

**Electrical Characteristics**

Frequency range 1: 2400 - 2500  
Gain 1 dBi (with antenna cable): 10.4  
VSWR max: 1.7:1  
E-Plane (3 dB beamwidth): 13 degrees  
H-Plane (3 dB beamwidth): 120 degrees  
Polarization: Linear (vertical)  
Impedance (Ohms): 50  
RF connector: Reverse SMA (male)  
Cable length: 2.75 ft. (0.84 cm)

**Physical Characteristics**

Dimensions: 3.2(d) x 23.2(w) x 2.1(h) in. (8.13 x 58.93 x 5.33 cm)  
Wind surface area: 0.55 sq. ft. (0.05 sq.

m)  
Wind survival: 125 mph (201.13 km/hr)  
Weight: 1.5 lb. (0.68 kg)  
Mounting style: Flush wall mount, articulating wall, or mast  
Enclosure: PVC/Acrylic  
Front-to-back ratio (dB): 18

**Environment**

Operating temperature: -22°F to 131°F (-30°C to 55°C)  
Non-operating/storage temperature: -40°F to 149°F (-40°C to 65°C)

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