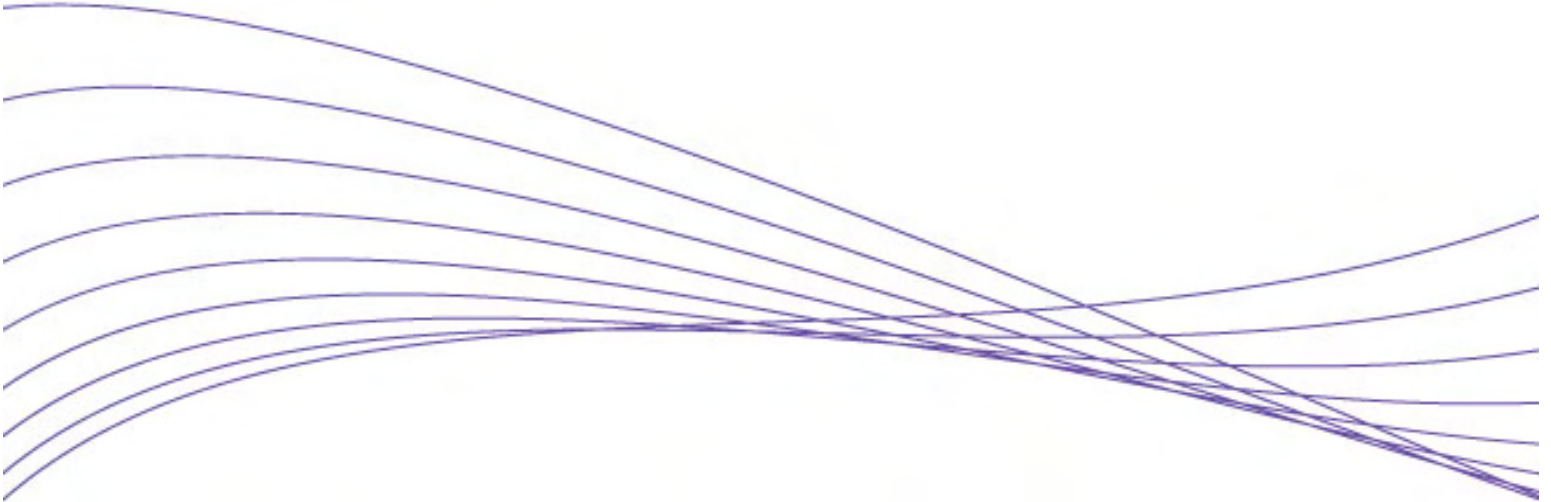


ProCurve Wireless Edge Services xl Module

Working in conjunction with ProCurve radio ports, the ProCurve Wireless Edge Services xl Module provides centralized wireless LAN configuration and management of advanced wireless services, enabling a resilient, highly secure, mobile multi-service network. With the addition of the module, the ProCurve Switch 5300xl series enables network administrators to centrally manage a unified wired and wireless network using ProCurve's network management products, including ProCurve Identity Driven Manager. This centralized approach to wired and wireless management streamlines device configuration and administration of security and role-based user policies that are enforced at the edge of the network, regardless of how or where the user connects.



ProCurve Wireless Edge
Services xl Module (J9001A)



ProCurve Wireless Edge Services xl Module

Features and benefits

Resiliency and high availability

- **Network self-healing:** In the event of a radio port failure, the module will automatically adjust transmit power and data rate on adjacent ProCurve Radio Ports to maintain wireless LAN coverage.
- **RF detection and interference avoidance:** The system automatically recalibrates radio port channel assignments to avoid environmental or other 802.11-based wireless interference.
- **Module redundancy:** If a primary Wireless Edge Services xl Module should fail, the ProCurve Wireless Services Redundant xl Module will automatically adopt the radio ports that were associated with the primary module.
- **Module power redundancy:** As an integrated service module for the ProCurve Switch 5300xl series, the module leverages the fully redundant, hot-swappable power supplies of the chassis for higher service uptime.

Centralized wireless LAN management

- **Centralized management:** A single point to configure system-wide wireless LAN setup and operation is provided, including SSID, security, and authentication options as well as advanced wireless services. Wireless LAN settings are automatically administered to designated ProCurve Radio Ports, eliminating the cost and time associated with individual configuration of access points.
- **Zero-configuration deployment:**
 - **Automatic wireless LAN provisioning:** Upon installation of a Wireless Edge Services xl Module, a 5300xl series switch will automatically configure the module to discover and adopt ProCurve Radio Ports.
 - **Auto radio port discovery:** Simply connect each ProCurve Radio Port to a Power over Ethernet-enabled network port, and the device will be automatically discovered and configured by the Wireless Edge Services xl Module.

Scalable

- **Scalable network capacity:** The ProCurve Wireless Edge Services xl Module, as purchased, provides support for up to 12 ProCurve Radio Ports. The module easily accommodates additional radio port capacity with the purchase of the ProCurve Wireless Services Module 12 RP License. Each license provides support for an additional 12 ProCurve Radio Ports, for a maximum of 36 ProCurve Radio Ports per module. With support for two ProCurve Wireless Edge Services xl Modules per chassis, each switch in the 5300xl series can manage a total of 72 radio ports.

Security

- **ProCurve Identity Driven Manager (IDM) security and access control:**
 - **Per-user ACLs:** User access to specific network resources is permitted or denied based on user identity and time of day, so multiple types of users (employees, visitors, temporary workforce) on the same network can access specific network services without risk to network security or unauthorized access to sensitive data.
 - **Automatic VLAN assignment:** Users are automatically assigned to the appropriate VLAN based on their identity, community, and time of day.
 - **Rate limits:** Ingress rate limits are automatically applied to user traffic based on identity, community, and time of day.
- **4 BSSIDs/16 SSIDs per radio:** Multiple wireless broadcast domains with separate security, authentication, and policy configuration per SSID provide access control of network resources based on user authentication and level of trusted security between the wireless user and the network.
- **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 Wireless Edge Services xl Module

- **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
- **Web-based authentication:** similar to 802.1X, provides a browser-based environment to authenticate clients that do not support the 802.1X supplicant
- **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
- **Neighbor access point (rogue AP) detection:** The Wireless Edge Services xl Module provides a system-wide view of all access points detected in the wireless LAN coverage area. Discovered access points are easily classified as either approved or unapproved to simplify network monitoring of "rogue APs". Each ProCurve Radio Port simultaneously scans for the presence of other access points while servicing wireless clients. Radio ports can be configured as dedicated RF monitors for continuous monitoring of the RF environment.
- **Secure management access:** all access methods--CLI, GUI, or MIB--are securely encrypted through SSHv2, SSL, and/or SNMPv3
- **Management VLAN:** segments traffic to and from management interfaces, including CLI/telnet, Web browser interface, and SNMP
- **Inter-station traffic blocking:** prevents communication between client devices associated on the same radio port
- **Closed system:** restricts broadcast of SSID as a security measure to conceal presence of the wireless network

Connectivity

- **Modular network connectivity:** The modular design of the fully featured ProCurve Switch 5300xl series provides choice of port type, density, and Power over Ethernet capability

to simplify network deployment, with expansion to scale as network needs change.

- **Scalable radio architecture:** The ProCurve family of radio ports provides choice and flexibility to address a wide range of deployment needs. Network architects can choose between flexible dual-radio (802.11a and 802.11g) and highly cost-effective single-radio (802.11g) designs, integrated or external antenna configurations, and customized housings for office area and in-ceiling deployment.
- **IEEE 802.11h International Telecommunication Union (ITU) compliant:** Dynamic Frequency Selection (DFS) and Transmit Power Control (TCP) are employed to automatically select another channel and adjust transmit power to minimize interference with systems such as radar, if detected on the same channel.
- **International country configuration:** Centrally configured on the Wireless Edge Services xl Module, all ProCurve Radio Ports automatically adjust to match selected country 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

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
- **Fast, secure roaming:** enables seamless, fast roaming with pre-cached authentication credentials for wireless users

Network management

ProCurve Wireless Edge Services xl Module

- **ProCurve Identity Driven Manager (IDM):** This software extends the functionality of ProCurve Manager Plus to include authorization control features for the ProCurve Wireless Edge Services xl Module and ProCurve switches using RADIUS servers and MAC authentication or 802.1X security protocols. Using IDM, you can 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 Wireless LAN devices, including the ProCurve Wireless Edge Services xl Module.

Advanced capabilities include rogue device detection, device configuration and firmware updates, monitoring of wireless client association activity, and e-mail/pager alerts.

Product certifications

- **Industry certifications:** Visit www.procurve.com for an up-to-date list of industry certifications.

Industry-leading warranty

- **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 for part numbers and service-level descriptions.

ProCurve Wireless Edge Services xl Module

Specifications

Physical characteristics

Dimensions
8.0(d) x 8.97(w) x 1.75(h) in.
(20.32 x 22.78 x 4.45 cm)
Weight
1.9 lb. (0.86 kg)

Environment

Operating
- Temperature: 41°F to 104°F
(5°C to 40°C)
- Relative humidity: 15% to
80% @ 104°F (40°C),
non-condensing

- Altitude: up to 15,091 ft. (4.6
km)
Non-operating/Storage
- Temperature: -40°F to
158°F (-40°C to 70°C)
- Relative humidity: 20% to
90% @ 149°F (65°C),
non-condensing

Web interface

Microsoft Internet Explorer 5.5
or higher

Safety

EN 60950/IEC 60950; UL
60950

Emissions

EN55022/CISPR-22 Class A

Immunity

EN: EN55024, CISPR 24
ESD: IEC 61000-4-2
Radiated: IEC 61000-4-3
Surge: IEC 61000-4-5
Conducted: IEC 61000-4-6
Power frequency magnetic
field: IEC 61000-4-8
Voltage dips and interruptions:
IEC 61000-4-11

Standards and protocols

RFC 783 TFTP; RFC 854 Telnet;
RFC 768 UDP; RFC 792 ICMP;
RFC 793 TCP; RFC 826 ARP;
RFC 2030 SNTP; 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;
SSHv2 Secure Shell; Secure
Sockets Layer (SSL); IEEE
802.1X Network Login; IEEE
802.11i Medium Access Control
(MAC) Security Enhancements;
IEEE 802.1Q VLANs; IEEE
802.1Q VLAN tagging; IEEE
802.1p Priority;
SNMPv1/v2c/v3; HTML and
telnet management; RFC 1493
Bridge MIB; RFC 1213 MIB II;
RFC 3164 Syslog; RFC 791 IP;
RFC 894 IP over Ethernet; RFC
1541 DHCP; RFC 2068 HTTP

ProCurve Wireless Edge Services xl Module

Accessories



ProCurve Redundant Wireless Services xl Module (J9003A)

The redundant module automatically adopts ProCurve Radio Ports if the primary ProCurve Wireless Edge Services xl Module is unavailable or should fail.

Physical characteristics

Dimensions: 8.97 (d) x 8.0 (w) x 1.75 (h) in.
(22.78 x 20.32 x 4.45 cm)
Weight: 1.9 lb. (0.86 kg)



ProCurve Wireless Services Module 12 RP License (J9002A)

The ProCurve Wireless Services Module 12 RP License provides support for 12 additional ProCurve Radio Ports on a Wireless Edge Services xl Module, for a maximum of 36 radio ports per module.

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