





Product overview

HP ProCurve MultiService Mobility Access Points (MSM APs) bring intelligence to the network edge by providing scalable, seamless wireless access anywhere, anytime. Unlike "thin" or "lite" access points, the MSM AP feature set is abundantly rich, dispensing multiple network services, enforcing robust security, and delivering high-performance client access. An integral component of the HP ProCurve Intelligent Mobility Solution, MSM APs support a plug-and-play automatic configuration and ongoing central control by ProCurve MultiService Mobility Controllers for the highest degree of configurability and ease of management.

Key features

- Single, dual, and tri radio
- 802.11a/b/g & 802.11n APs, 802.11b/g access device
- Self-healing, self-optimizing local mesh

Features and benefits

Industry-leading warranty



Excludes J9422A and J9423A

Connectivity

- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100 ports
- 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
- IEEE 802.3af Power over Ethernet: provides up to 15.4 W per port to IEEE 802.3af-compliant PoE powered devices such as IP phones, wireless access points, and security cameras
- Auto Channel Select (ACS): helps reduce radio co-channel interference by automatically selecting an unoccupied radio channel

Mobility

Anywhere, anytime wireless coverage:

- Single, dual, and tri-radio IEEE 802.11a/b/g and 802.11n access points
- Integrated wired & wireless single radio
 802.11b/g access device with 4 Ethernet ports &
 1 pass-through port
- Per-radio software-selectable configuration of frequency bands
- Self-healing, self-optimizing local mesh extends network availability
- Wi-Fi Alliance certified for interoperability with all 802.11a/b/g/n client devices
- IEEE 802.3af PoE or external power cord on selected models
- Interoperability: Wi-Fi Alliance certifications, including IEEE 802.11g Wi-Fi and WPA2 to help ensure multivendor interoperability

Virtual Service Communities (VSCs):

- Up to 16 SSIDs, each with unique MAC address, configurable SSID broadcasts
- Individual security and QoS profiles per VSC
- Configurable DTIM and minimum data rate per VSC
- Each VSC mapped to separate IEEE 802.1q/A and VLANs
- Security filter
- IP filter

AP Client Access Control functions:

- IEEE 802.1x authentication using EAP-SIM, EAP-FAST, EAP-TLS, EAP-TTLS, and PEAP
- MAC address authentication using local or RADIUS access lists
- RADIUS AAA using EAP-MD5, PAP, CHAP, and MS-CHAPv2
- RADIUS Client (RFC 2865 and 2866) with location-aware support
- Layer 2 wireless client isolation

[♦] For as long as you own the product, with next-business-day advance replacement (available in most countries). The following hardware products and their related series modules have a one-year hardware warranty with extensions available: HP ProCurve Routing Switch 9300m series, HP ProCurve Switch 8100fl series, HP ProCurve Network Access Controller 800, and HP ProCurve DCM Controller. The following hardware mobility products have a one-year hardware warranty with extensions available: HP ProCurve M111 Client Bridge, HP ProCurve MSM3xxR Access Points, HP ProCurve MSM7xx Mobility and Access Controllers, HP ProCurve RF Manager IDS/IPS Systems, HP ProCurve MSM Power Supplies, HP ProCurve 1 Port Power Injector, HP ProCurve CNMS Appliances, and HP ProCurve MSM317 Access Device. Disk drives in the HP ProCurve ONE Services zl modules, HP ProCurve Mgm317 Access Device and Mgm1 Services zl module, and HP ProCurve MSM765zl Mobility Controller have a five year hardware warranty. Standalone software, upgrades, or licenses may have a different warranty duration. For details, refer to the ProCurve Software license, Warranty, and Support booklet at www.procurve.com/varranty.

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
- Local wireless bridge client traffic filtering: when enabled, prevents communication between wireless devices associated with the same access point
- 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

Quality of Service (QoS)

- IEEE 802.1p prioritization: delivers data to devices based on the priority and type of traffic
- 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

Wireless:

- L2/L3/L4 classification: IEEE 802.1p VLAN priority, SpectraLink SVP, DiffServ, VTP/TCP, and Post
- Wi-Fi MultiMedia (WMM), IEEE 802.11e EDCF, and Service-Aware priority assigned by VSC
- Maximum VoIP call capacity: 8 active calls on IEEE 802.11b, 30 active calls on IEEE 802.11a/g

Network management:

- Fully manageable using PCM3.0 AU1 and PMM3.0 AU2
- SNMP v2c, SNMP v3, MIB-II with Traps, and RADIUS Authentication Client MIB (RFC 2618)
- Embedded HTML management tool with secure access (SSL and VPN)
- Scheduled configuration and firmware upgrades from central server

Diagnostic:

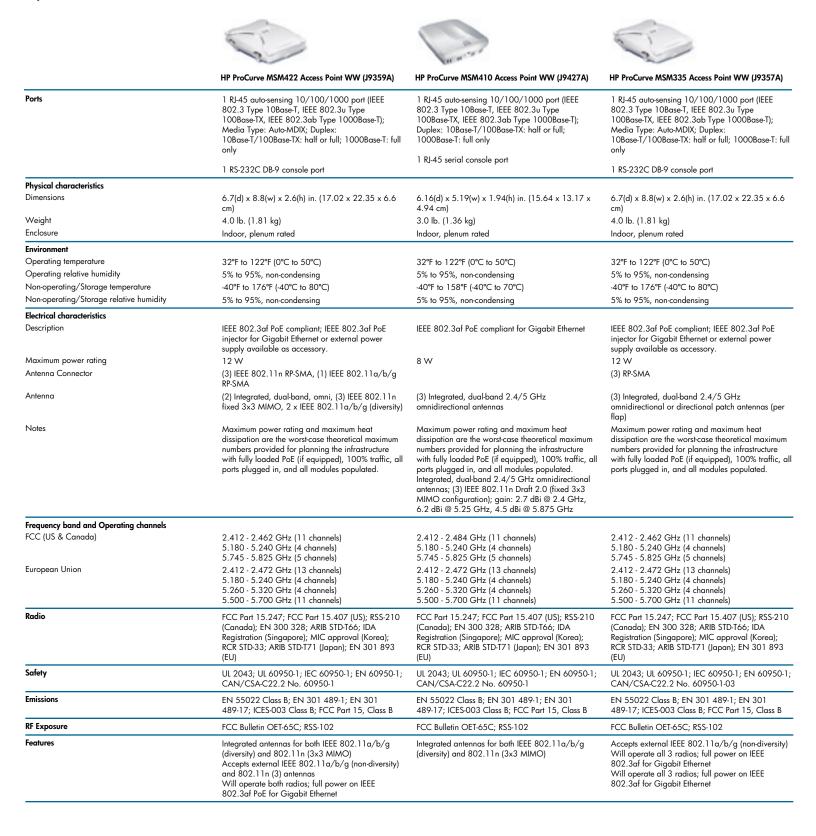
- Client event log records association, authentication, and DHCP events
- Packet capture tool for Ethernet and IEEE 802.11 interfaces (PCAP format)
- Data Rate Matrix

RF management:

- Automatically selects channel on power-up and continuously improves channel selection based on background interference scan
- Configurable background rogue scanning
- Automatically adjusts transmit power to reduce interference

Warranty and support

- ProCurve Lifetime Warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries)
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to the HP Web site at www.procurve.com/support for details on the support provided and the period during which support is available
- Software releases: refer to the HP Web site at www.procurve.com/support for details on the software releases provided and the period during which software releases are available



| | HP ProCurve MSM422 Access Point WW (J9359A) | HP ProCurve MSM410 Access Point WW (J9427A) | HP ProCurve MSM335 Access Point WW (J9357A) |
|----------|---|--|--|
| Notes | IEEE 802.11a, IEEE 802.11g, IEEE 802.11b, WPA-Enterprise, WPA2-Enterprise, WMM, WMM Powersave, EAP-TLS, EAP-TLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h IEEE 802.11n Draft 2.0 Capabilities: 3x3 MIMO with 2 spatial streams, Cyclic Shift Diversity (CSD), 20 MHz and Auto 20/40 MHz channels, data rates up to 300 Mbps, Maximal Ratio Combining (MRC), transmit beamforming, packet aggregation: A-MPDU, A-MS Maximum transmit power varies by country. | Wi-Fi compliance: IEEE 802.11n DRAFT 2.0, IEEE 802.11a, IEEE 802.11g, IEEE 802.11b, WPA-Enterprise, WPA2-Enterprise, WMM, WMM Powersave, EAP-TLS, EAP-TLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h IEEE 802.11n Draft 2.0 Capabilities: 3x3 MIMO with 2 spotial streams, Cyclic Shift Diversity (CSD), 20 MHz and Auto 20/40 MHz channels, data rates up to 300 Mbps, Maximal Ratio Combining (MRC), transmit beamforming, packet aggregation: A-MPDU, A-MSD Maximum transmit power varies by country. | Wi-Fi compliance: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g WPA and WPA2 Wireless Multimedia (WMM), WMM Powersave EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h Maximum transmit power varies by country. |
| Services | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN667E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN668E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN670E) 3-year, 24x7 SW phone support, software updates (UN669E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR980E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR981E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR982E) 4-year, 24x7 SW phone support, software updates (UR983E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR984E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR985E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR985E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR986E) 5-year, 24x7 SW phone support, software updates (UR987E) Refer to the HP Web site at www.procurve.com/services for details on the | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN684E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN686E) 3-year, 24x7 SW phone support, software updates (UN685E) 4-year, 4-hour onsite, 13x5 coverage for hardware (US013E) 4-year, 4-hour onsite, 24x7 coverage for hardware (US014E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US015E) 4-year, 24x7 SW phone support, software updates (US016E) 5-year, 4-hour onsite, 13x5 coverage for hardware (US017E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US018E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US019E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US019E) 5-year, 24x7 SW phone support, software updates (US020E) Refer to the HP Web site at www.procurve.com/services for details on the | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN671E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN672E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN674E) 3-year, 24x7 SW phone support, software updates (UN673E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR988E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR989E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR990E) 4-year, 24x7 SW phone support, software updates (UR991E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR992E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR993E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR994E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR994E) 5-year, 24x7 SW phone support, software updates (UR995E) Refer to the HP Web site at www.procurve.com/services for details on the |
| | service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. | service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. | service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. |

Specifications (continued)

HP ProCurve MSM422 Access Point WW (J9359A)

HP ProCurve MSM410 Access Point WW (J9427A)

HP ProCurve MSM335 Access Point WW (J9357A)

HP ProCurve MSM422 Access Point WW (J9359A)

Radio characteristics: IEEE 802.11a/b/g and IEEE 802.11a/b/g/n Draft 2.0

| Data rate | IEEE 802.11n 20 MHz Channel MCS0/8 Mbps | IEEE 802.11n 20 MHz Channel MCS7/15 Mbps | IEEE 802.11n 40 MHz Channel MCS0/8 Mbps | IEEE 802.11n 40 MHz Channel MCS7/15 Mbps | IEEE 802.11a 6 Mbps | IEEE 802.11a 54 Mbps | IEEE 802.11g 6 Mbps | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | IEEE 802.11b 11 Mbps |
|----------------------|---|--|---|--|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Receiver sensitivity | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -94 dBm | -87 dBm |
| Transmit power | 18 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM410 Access Point WW (J9427A)

Radio characteristics: IEEE 802.11a/b/g/n Draft 2.0

| Data rate | (5 GHz) 20 | (5 GHz) 20 | (5 GHz) 40 | (5 GHz) 40 | IEEE 802.11a 6 Mbps | | | (2.4 GHz) 20 | (2.4 GHz) 40 | | | IEEE 802.11g 54 Mbps |
|----------------------|------------|------------|------------|------------|------------------------|---------|---------|--------------|--------------|---------|---------|-------------------------|
| | MHz | MHz | MHz | MHz | | | MHz | MHz | MHz | MHz | | |
| | | | MCS0/MCS8 | | | | | MCS7/MCS1 | | | | |
| | Mbps | 5 Mbps | Mbps | 5 Mbps | | | Mbps | 5 Mbps | Mbps | 5 Mbps | | |
| Receiver sensitivity | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -67 dBm | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -70 dBm |
| Transmit power | 18 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 12 dBm | 19 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 13 dBm |

HP ProCurve MSM335 Access Point WW (J9357A)

Radio characteristics: 3 IEEE 802.11a/b/g

| Data rate | | IEEE 802.11a 54 Mbps | | | IEEE 802.11b 1 Mbps | IEEE 802.11b 11 Mbps |
|----------------------|---------|-------------------------|---------|---------|------------------------|-------------------------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -94 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

Standards and protocols

(applies to all products in series)

Mobility IEEE 802.11a High Speed Physical Layer in the 5

IEEE 802.11b Higher-Speed Physical Layer

Extension in the 2.4 GHz Band IEEE 802.11d Global Harmonization

IEEE 802.11g Further Higher Data Rate Extension in

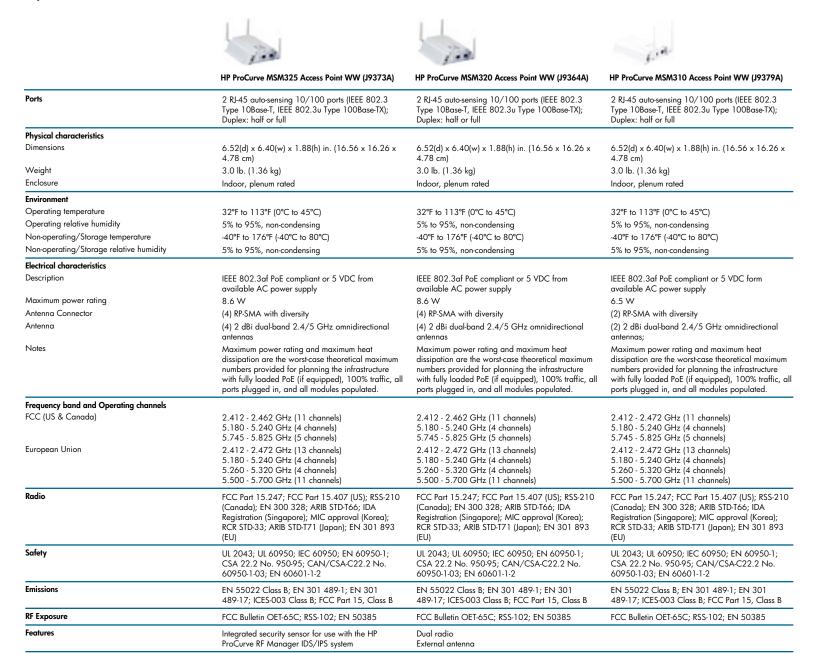
the 2.4 GHz Band

IEEE 802.11i Medium Access Control (MAC)

| | HP ProCurve MSM42 | 2 Access Point WW (J9359A) HP ProCurve | MSM410 Access Point WW (J9427A) H | P ProCurve MSM335 Access Point WW (J9357 |
|--------------------------|---------------------|--|-----------------------------------|--|
| HP ProCurve MSM422 Acces | s Point WW (J9359A) | | | |
| MCS Index | 800 | 0 nS | 4 | 100 nS |
| | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) |
| 0 | 6.5 | 13.5 | 7.2 | 15 |
| 1 | 13 | 27 | 14.4 | 30 |
| 2 | 19.5 | 40.5 | 21.7 | 45 |
| 3 | 26 | 54 | 28.9 | 60 |
| 4 | 39 | 81 | 43.3 | 90 |
| 5 | 52 | 108 | 57.8 | 120 |
| 6 | 58.5 | 121.5 | 65 | 135 |
| 7 | 65 | 135 | 72.2 | 157.5 |
| 8 | 13 | 27 | 14.4 | 30 |
| 9 | 26 | 54 | 28.9 | 60 |
| 10 | 39 | 81 | 43.3 | 90 |
| 11 | 52 | 108 | 57.8 | 120 |
| 12 | 78 | 162 | 86.7 | 180 |
| 13 | 104 | 216 | 115.6 | 240 |
| 14 | 117 | 243 | 130 | 270 |
| 15 | 130 | 270 | 144.4 | 300 |
| HP ProCurve MSM410 Acces | s Point WW (J9427A) | | | |
| MCS Index | 800 | O nS | 4 | 000 nS |
| | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) |
| 0 | 6.5 | 13.5 | 7.2 | 15 |
| 1 | 13 | 27 | 14.4 | 30 |
| 2 | 19.5 | 40.5 | 21.7 | 45 |
| 3 | 26 | 54 | 28.9 | 60 |
| 4 | 39 | 81 | 43.3 | 90 |
| 5 | 52 | 108 | 57.8 | 120 |
| 6 | 58.5 | 121.5 | 65 | 135 |
| 7 | 65 | 135 | 72.2 | 157.5 |
| 8 | 13 | 27 | 14.4 | 30 |
| 9 | 26 | 54 | 28.9 | 60 |
| 10 | 39 | 81 | 43.3 | 90 |
| 11 | 52 | 108 | 57.8 | 120 |
| 12 | 78 | 162 | 86.7 | 180 |
| 13 | 104 | 216 | 115.6 | 240 |
| | | | | 070 |
| 14 | 117 | 243 | 130 | 270 |

Specifications

Notes



Maximum transmit power varies by country.

Maximum transmit power varies by country

Maximum transmit power varies by country

Specifications (continued)

HP ProCurve MSM325 Access Point WW (J9373A) HP ProCurve MSM320 Access Point WW (J9364A) HP ProCurve MSM310 Access Point WW (J9379A) Services 3-year, 4-hour onsite, 13x5 coverage for hardware 3-year, 4-hour onsite, 13x5 coverage for hardware 3-year, 4-hour onsite, 13x5 coverage for hardware (UN683E) (UN679E) (UN687E) 3-year, 4-hour onsite, 24x7 coverage for hardware 3-year, 4-hour onsite, 24x7 coverage for hardware 3-year, 4-hour onsite, 24x7 coverage for hardware (UN680E) (ÚN684E) (UN688E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 3-year, 4-hour onsite, 24x7 coverage for hardware, 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN682E) 24x7 software phone support (UN686E) 24x7 software phone support (UN690E) 3-year, 24x7 SW phone support, software updates 3-year, 24x7 SW phone support, software updates 3-year, 24x7 SW phone support, software updates (UN685E) (UN689E) (UN681E) 4-year, 4-hour onsite, 13x5 coverage for hardware 4-year, 4-hour onsite, 13x5 coverage for hardware 4-year, 4-hour onsite, 13x5 coverage for hardware (US005E) 4-year, 4-hour onsite, 24x7 coverage for hardware . 4-year, 4-hour onsite, 24x7 coverage for hardware . 4-year, 4-hour onsite, 24x7 coverage for hardware (US006E) (US014E) (US022E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 4-year, 4-hour onsite, 24x7 coverage for hardware, 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US007E) 24x7 software phone (USO23E) 24x7 software phone (USO15E) 4-year, 24x7 SW phone support, software updates 4-year, 24x7 SW phone support, software updates 4-year, 24x7 SW phone support, software updates 5-year, 4-hour onsite, 13x5 coverage for hardware 5-year, 4-hour onsite, 13x5 coverage for hardware 5-year, 4-hour onsite, 13x5 coverage for hardware (US009E) (USO17E) (US025E) 5-year, 4-hour onsite, 24x7 coverage for hardware 5-year, 4-hour onsite, 24x7 coverage for hardware (US018E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US010E) (US026E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 5-year, 4-hour onsite, 24x7 coverage for hardware, 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (USO11E) 24x7 software phone (USO19E) 24x7 software phone (USO27E) 5-year, 24x7 SW phone support, software updates 5-year, 24x7 SW phone support, software updates 5-year, 24x7 SW phone support, software updates (US012E) (US020E) (US028E) Refer to the HP Web site at Refer to the HP Web site at Refer to the HP Web site at www.procurve.com/services for details on the www.procurve.com/services for details on the www.procurve.com/services for details on the service-level descriptions and product numbers. For service-level descriptions and product numbers. For service-level descriptions and product numbers. For details about services and response times in your details about services and response times in your details about services and response times in your area, please contact your local HP sales office. area, please contact your local HP sales office. area, please contact your local HP sales office.

HP ProCurve MSM325 Access Point WW (J9373A)

Radio characteristics: Dual IEEE 802.11a/b/a

| Data rate | | IEEE 802.11a 54 Mbps | | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | IEEE 802.11b 11 Mbps |
|----------------------|---------|-------------------------|---------|-------------------------|------------------------|-------------------------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 1.3 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM320 Access Point WW (J9364A)

Radio characteristics: Dual IEEE 802.11a/b/g

| Data rate | | IEEE 802.11a 54 Mbps | | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | IEEE 802.11b 11 Mbps |
|----------------------|---------|-------------------------|---------|-------------------------|------------------------|-------------------------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM310 Access Point WW (J9379A)

Radio characteristics: IEEE 802.11a/b/g

| Data rate | IEEE 802.11a 6 Mbps | | | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | |
|----------------------|------------------------|---------|---------|-------------------------|------------------------|----------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

Standards and protocols

(applies to all products in series)

Mobility

IEEE 802.11a High Speed Physical Layer in the 5

IEEE 802.11b Higher-Speed Physical Layer

Extension in the 2.4 GHz Band

IEEE 802.11d Global Harmonization

IEEE 802.11g Further Higher Data Rate Extension in

the 2.4 GHz Band

IEEE 802.11i Medium Access Control (MAC)

| | | The state of the s | |
|---|---|--|---|
| | HP ProCurve MSM422 Access Point US (J9358A) | HP ProCurve MSM410 Access Point US (J9426A) | HP ProCurve MSM335 Access Point US (J9356A) |
| Ports | 1 RJ-45 auto-sensing 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-MDIX; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only | 1 RJ-45 auto-sensing 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only | 1 RJ-45 auto-sensing 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T); Media Type: Auto-MDIX; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only |
| | 1 RS-232C DB-9 console port | 1 RJ-45 serial console port | 1 RS-232C DB-9 console port |
| Physical characteristics | | | |
| Dimensions | $6.7(d) \times 8.8(w) \times 2.6(h)$ in. $(17.02 \times 22.35 \times 6.6$ cm) | $6.16(d) \times 5.19(w) \times 1.94(h)$ in. (15.64 x 13.17 x 4.94 cm) | $6.7(d) \times 8.8(w) \times 2.6(h)$ in. $(17.02 \times 22.35 \times 6.6 \text{ cm})$ |
| Weight | 4.0 lb. (1.81 kg) | 3.0 lb. (1.36 kg) | 4.0 lb. (1.81 kg) |
| Enclosure | Indoor, plenum rated | Indoor, plenum rated | Indoor, plenum rated |
| Environment | | | |
| Operating temperature | 32°F to 122°F (0°C to 50°C) | 32°F to 122°F (0°C to 50°C) | 32°F to 122°F (0°C to 50°C) |
| Operating relative humidity | 5% to 95%, non-condensing | 5% to 95%, non-condensing | 5% to 95%, non-condensing |
| Non-operating/Storage temperature | -40°F to 176°F (-40°C to 80°C) | -40°F to 158°F (-40°C to 70°C) | -40°F to 176°F (-40°C to 80°C) |
| Non-operating/Storage relative humidity | 5% to 95%, non-condensing | 5% to 95%, non-condensing | 5% to 95%, non-condensing |
| Electrical characteristics | | | |
| Description | IEEE 802.3af PoE compliant; IEEE 802.3af PoE for Gigabit Ethernet or external power supply available as accessory. | IEEE 802.3af PoE compliant for Gigabit Ethernet | IEEE 802.3af PoE compliant; IEEE 802.3af PoE for Gigabit Ethernet or External power supply available as accessory |
| Maximum power rating | 12 W | 8 W | 12 W |
| Antenna Connector | (3) IEEE 802.11n RP-SMA, 1 IEEE 802.11a/b/g RP-SMA | | (3) RP-SMA |
| Antenna | Integrated, dual-band, omnidirectional, 3 x IEEE 802.11n fixed 3x3 MIMO, 2 x 802.11a/b/g (diversity) | (3) Integrated, dual-band 2.4/5 GHz omnidirectional antennas | (3) Integrated, dual-band 2.4/5 GHz omnidirectional or directional patch antennas (per flap) |
| Notes | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. Integrated, dual-band 2.4/5 GHz omnidirectional antennas; (3) IEEE 802.11n Draft 2.0 (fixed 3x3 MIMO configuration); gain: 2.7 dBi @ 2.4 GHz, 6.2 dBi @ 5.25 GHz, 4.5 dBi @ 5.875 GHz | Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. |
| Frequency band and Operating channels | | | |
| FCC (US & Canada) European Union | 2.412 - 2.462 GHz (11 channels) 5.180 - 5.240 GHz (4 channels) 5.745 - 5.825 GHz (5 channels) 2.412 - 2.472 GHz (13 channels) 5.180 - 5.240 GHz (4 channels) 5.260 - 5.320 GHz (4 channels) | 2.412 · 2.462 GHz (11 channels) 5.180 · 5.240 GHz (4 channels) 5.745 · 5.825 GHz (5 channels) 2.412 · 2.472 GHz (13 channels) 5.180 · 5.240 GHz (4 channels) 5.260 · 5.320 GHz (4 channels) | 2.412 - 2.462 GHz (11 channels) 5.180 - 5.240 GHz (4 channels) 5.745 - 5.825 GHz (5 channels) 2.412 - 2.472 GHz (13 channels) 5.180 - 5.240 GHz (4 channels) 5.260 - 5.320 GHz (4 channels) |
| | 5.500 - 5.700 GHz (11 channels) | 5.500 - 5.700 GHz (11 channels) | 5.500 - 5.700 GHz (11 channels) |
| Radio | FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; ARIB STD-T66; IDA Registration (Singapore); MIC approval (Korea); RCR STD-33; ARIB STD-T71 (Japan); EN 301 893 (EU) | FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; ARIB STD-T66; IDA Registration (Singapore); MIC approval (Korea); RCR STD-33; ARIB STD-T71 (Japan); EN 301 893 (EU) | FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; ARIB STD-T66; IDA Registration (Singapore); MIC approval (Korea); RCR STD-33; ARIB STD-T71 (Japan); EN 301 893 (EU) |
| Safety | UL 2043; UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1 | UL 2043; UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1 | UL 2043; UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03 |
| Emissions | EN 55022 Class B; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, Class B | EN 55022 Class B; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, Class B | EN 55022 Class B; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, Class B |
| RF Exposure | FCC Bulletin OET-65C; RSS-102 | FCC Bulletin OET-65C; RSS-102 | FCC Bulletin OET-65C; RSS-102 |
| Features | Dual radio: IEEE 802.11n for high-throughput applications and IEEE 802.11a/b/g for legacy support Integrated antennas for both IEEE 802.11a/b/g (diversity) and 802.11n (3x3 MIMO) Accepts external IEEE 802.11a/b/g (non-diversity) and 802.11n (3) antennas Will operate both radios; full power on IEEE 802.3af PoE for Gigabit Ethernet | | Integrated security sensor for use with the HP ProCurve RF Manager IDS/IPS system |

| | HP ProCurve MSM422 Access Point US (J9358A) | HP ProCurve MSM410 Access Point US (J9426A) | HP ProCurve MSM335 Access Point US (J9356A) |
|----------|--|--|--|
| Notes | Wi-Fi compliance: IEEE 802.11n DRAFT 2.0, IEEE 802.11a, IEEE 802.11g, IEEE 802.11b, WPA-Enterprise, WPA2-Enterprise, WMM, WMM Powersave, EAP-TLS, EAP-TLS/MSCHAPV2, PEAPV0/EAP-MSCHAPV2, PEAPV1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h IEEE 802.11b rotal 2.0 Capabilities: 3x3 MIMO with 2 spatial streams, Cyclic Shift Diversity (CSD), 20 MHz and Auto 20/40 MHz channels, data rates up to 300 Mbps, Maximal Ratio Combining (MRC), transmit beamforming, packet aggregation: A-MPDU, A-MSD Maximum transmit power varies by country. | Wi-Fi compliance: IEEE 802.11n DRAFT 2.0, IEEE 802.11a, IEEE 802.11g, IEEE 802.11b, WPA-Enterprise, WPA2-Enterprise, WMM, WMM Powersave, EAP-TLS, EAP-TLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h IEEE 802.11n Draft 2.0 capabilities: 3x3 MIMO with 2 spatial streams, Cyclic Shift Diversity (CSD), 20 MHz and Auto 20/40 MHz channels, data rates up to 300 Mbps, Maximal Ratio Combining (MRC), transmit beamforming, packet aggregation: A-MPDU, A-MSD Maximum transmit power varies by country. | Wi-Fi compliance: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g WPA and WPA2 Wireless Multimedia (WMM), WMM Powersave EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, EAP-SIM, IEEE 802.11d, and IEEE 802.11h Maximum transmit power varies by country. |
| Services | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN667E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN668E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN670E) 3-year, 24x7 SW phone support, software updates (UN669E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR980E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR981E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR982E) 4-year, 24x7 SW phone support, software updates (UR983E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR984E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR984E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR985E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR986E) 5-year, 24x7 SW phone support, software updates (UR987E) Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN684E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN686E) 3-year, 24x7 SW phone support, software updates (UN685E) 4-year, 4-hour onsite, 13x5 coverage for hardware (US013E) 4-year, 4-hour onsite, 24x7 coverage for hardware (US014E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US015E) 4-year, 4-hour onsite, 13x5 coverage for hardware (US016E) 5-year, 4-hour onsite, 13x5 coverage for hardware (US015E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US018E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US018E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US019E) 5-year, 24x7 SW phone support, software updates (US020E) Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. | 3-year, 4-hour onsite, 13x5 coverage for hardware (UN671E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN672E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN674E) 3-year, 24x7 SW phone support, software updates (UN673E) 4-year, 24x7 SW phone support, software updates (UN673E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR988E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR989E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR990E) 4-year, 24x7 SW phone support, software updates (UR991E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR992E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR993E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR994E) 5-year, 24x7 SW phone support, software updates (UR995E) Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. |

Specifications (continued)

HP ProCurve MSM422 Access Point US (J9358A)

HP ProCurve MSM410 Access Point US (J9426A)

HP ProCurve MSM335 Access Point US (J9356A)

HP ProCurve MSM422 Access Point US (J9358A)

Radio characteristics: IEEE 802.11a/b/g and 802.11a/b/g/n Draft 2.0

| Data rate | IEEE 802.11n 20 MHz Channel MCS0/8 Mbps | IEEE 802.11n 20 MHz Channel MCS7/15 Mbps | IEEE 802.11n 40 MHz Channel MCS0/8 Mbps | IEEE 802.11n 40 MHz Channel MCS7/15 Mbps | IEEE 802.11a 6 Mbps | IEEE 802.11a 54 Mbps | IEEE 802.11g 6 Mbps | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | IEEE 802.11b 11 Mbps |
|----------------------|---|--|---|--|------------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|
| Receiver sensitivity | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -94 dBm | -87 dBm |
| Transmit power | 18 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM410 Access Point US (J9426A)

Radio characteristics: IEEE 802.11a/b/g/n Draft 2.0

| Data rate | (5 GHz) 20 | (5 GHz) 20 | (5 GHz) 40 | (5 GHz) 40 | IEEE 802.11a 6 Mbps | | | (2.4 GHz) 20 | (2.4 GHz) 40 | | | IEEE 802.11g 54 Mbps |
|----------------------|------------|------------|------------|------------|------------------------|---------|---------|--------------|--------------|---------|---------|-------------------------|
| | MHz | MHz | MHz | MHz | | | MHz | MHz | MHz | MHz | | |
| | | | MCS0/MCS8 | | | | | MCS7/MCS1 | | | | |
| | Mbps | 5 Mbps | Mbps | 5 Mbps | | | Mbps | 5 Mbps | Mbps | 5 Mbps | | |
| Receiver sensitivity | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -67 dBm | -82 dBm | -64 dBm | -79 dBm | -61 dBm | -87 dBm | -70 dBm |
| Transmit power | 18 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 12 dBm | 19 dBm | 10 dBm | 17 dBm | 10 dBm | 18 dBm | 13 dBm |

HP ProCurve MSM335 Access Point US (J9356A)

Radio characteristics: 3 IEEE 802.11a/b/g

| Data rate | | | IEEE 802.11g | | | |
|----------------------|---------|---------|--------------|---------|----------|----------|
| | 6 Mbps | 54 Mbps | 6 Mbps | 54 Mbps | I Mbps | 11 Mbps |
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -94 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

Standards and protocols

(applies to all products in series)

IEEE 802.11a High Speed Physical Layer in the 5

Mobility IEEE 802.1 GHz Band

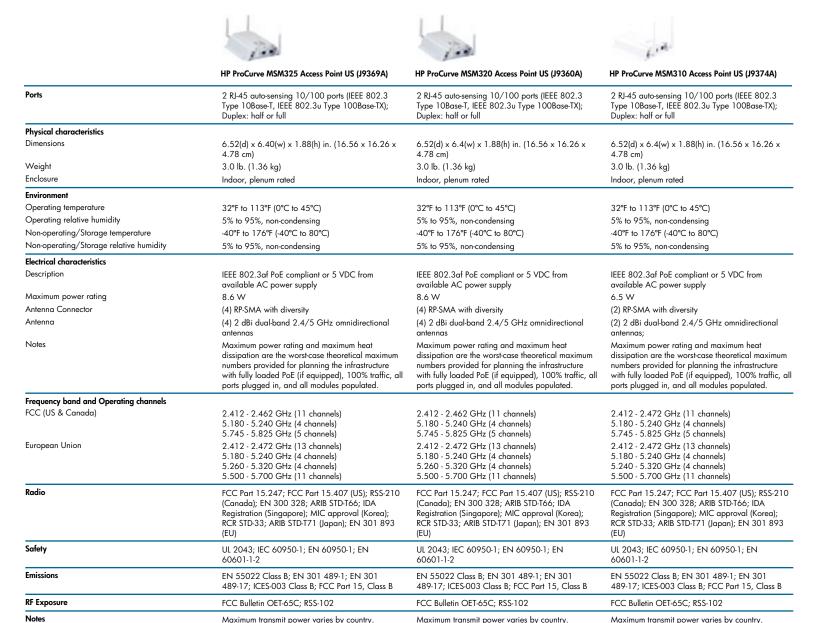
IEEE 802.11b Higher-Speed Physical Layer

Extension in the 2.4 GHz Band

IEEE 802.11d Global Harmonization IEEE 802.11g Further Higher Data Rate Extension in the 2.4 GHz Band

IEEE 802.11i Medium Access Control (MAC)

| | HP ProCurve MSM422 | 2 Access Point US (J9358A) HP ProCurve | MSM410 Access Point US (J9426A) | HP ProCurve MSM335 Access Point US (J9356) |
|--------------------------|----------------------|--|---------------------------------|--|
| HP ProCurve MSM422 Acces | ss Point US (J9358A) | | | |
| MCS Index | 800 |) nS | | 400 nS |
| | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) |
| 0 | 6.5 | 13.5 | 7.2 | 15 |
| 1 | 13 | 27 | 14.4 | 30 |
| 2 | 19.5 | 40.5 | 21.7 | 45 |
| 3 | 26 | 54 | 28.9 | 60 |
| 4 | 39 | 81 | 43.3 | 90 |
| 5 | 52 | 108 | 57.8 | 120 |
| 6 | 58.5 | 121.5 | 65 | 135 |
| 7 | 65 | 135 | 72.2 | 157.5 |
| 8 | 13 | 27 | 14.4 | 30 |
| 9 | 26 | 54 | 28.9 | 60 |
| 10 | 39 | 81 | 43.3 | 90 |
| 11 | 52 | 108 | 57.8 | 120 |
| 12 | 78 | 162 | 86.7 | 180 |
| 13 | 104 | 216 | 115.6 | 240 |
| 14 | 117 | 243 | 130 | 270 |
| 15 | 130 | 270 | 144.4 | 300 |
| HP ProCurve MSM410 Acces | ss Point US (J9426A) | | | |
| MCS Index | 800 |) nS | | 400 nS |
| | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) | 20MHz Rate (Mbps) | 40MHz Rate (Mbps) |
| 0 | 6.5 | 13.5 | 7.2 | 15 |
| 1 | 13 | 27 | 14.4 | 30 |
| 2 | 19.5 | 40.5 | 21.7 | 45 |
| 3 | 26 | 54 | 28.9 | 60 |
| 4 | 39 | 81 | 43.3 | 90 |
| 5 | 52 | 108 | 57.8 | 120 |
| 6 | 58.5 | 121.5 | 65 | 135 |
| 7 | 65 | 135 | 72.2 | 157.5 |
| 8 | 13 | 27 | 14.4 | 30 |
| 9 | 26 | 54 | 28.9 | 60 |
| 10 | 39 | 81 | 43.3 | 90 |
| 11 | 52 | 108 | 57.8 | 120 |
| 12 | 78 | 162 | 86.7 | 180 |
| 13 | 104 | 216 | 115.6 | 240 |
| 14 | 117 | 243 | 130 | 270 |
| 15 | 130 | 270 | 144.4 | 300 |



Specifications (continued)

HP ProCurve MSM325 Access Point US (J9369A) HP ProCurve MSM320 Access Point US (J9360A) HP ProCurve MSM310 Access Point US (J9374A) Services 3-year, 4-hour onsite, 13x5 coverage for hardware 3-year, 4-hour onsite, 13x5 coverage for hardware 3-year, 4-hour onsite, 13x5 coverage for hardware (UN683E) (UN679E) (UN687E) 3-year, 4-hour onsite, 24x7 coverage for hardware 3-year, 4-hour onsite, 24x7 coverage for hardware 3-year, 4-hour onsite, 24x7 coverage for hardware (UN680E) (ÚN684E) (UN688E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 3-year, 4-hour onsite, 24x7 coverage for hardware, 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN682E) 24x7 software phone support (UN686E) 24x7 software phone support (UN690E) 3-year, 24x7 SW phone support, software updates 3-year, 24x7 SW phone support, software updates 3-year, 24x7 SW phone support, software updates (UN685E) (UN689E) (UN681E) 4-year, 4-hour onsite, 13x5 coverage for hardware 4-year, 4-hour onsite, 13x5 coverage for hardware 4-year, 4-hour onsite, 13x5 coverage for hardware (US005E) 4-year, 4-hour onsite, 24x7 coverage for hardware . 4-year, 4-hour onsite, 24x7 coverage for hardware . 4-year, 4-hour onsite, 24x7 coverage for hardware (US006E) (US014E) (US022E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 4-year, 4-hour onsite, 24x7 coverage for hardware, 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US007E) 24x7 software phone (USO23E) 24x7 software phone (USO15E) 4-year, 24x7 SW phone support, software updates 4-year, 24x7 SW phone support, software updates 4-year, 24x7 SW phone support, software updates 5-year, 4-hour onsite, 13x5 coverage for hardware 5-year, 4-hour onsite, 13x5 coverage for hardware 5-year, 4-hour onsite, 13x5 coverage for hardware (US009E) (USO17E) (US025E) 5-year, 4-hour onsite, 24x7 coverage for hardware 5-year, 4-hour onsite, 24x7 coverage for hardware (US018E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US010E) (US026E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 5-year, 4-hour onsite, 24x7 coverage for hardware, 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (USO11E) 24x7 software phone (USO19E) 24x7 software phone (USO27E) 5-year, 24x7 SW phone support, software updates 5-year, 24x7 SW phone support, software updates 5-year, 24x7 SW phone support, software updates (US012E) (US020E) (US028E) Refer to the HP Web site at Refer to the HP Web site at Refer to the HP Web site at www.procurve.com/services for details on the www.procurve.com/services for details on the www.procurve.com/services for details on the service-level descriptions and product numbers. For service-level descriptions and product numbers. For service-level descriptions and product numbers. For details about services and response times in your details about services and response times in your details about services and response times in your area, please contact your local HP sales office. area, please contact your local HP sales office. area, please contact your local HP sales office.

HP ProCurve MSM325 Access Point US (J9369A)

Radio characteristics: Dual IEEE 802.11a/b/q

| Data rate | | | | IEEE 802.11g | | |
|----------------------|---------|---------|---------|--------------|----------|----------|
| | 6 Mbps | 54 Mbps | 6 Mbps | 54 Mbps | 1 Mbps | 11 Mbps |
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM320 Access Point US (J9360A)

Radio characteristics: Dual IEEE 802.11a/b/g

| Data rate | | | | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | IEEE 802.111 11 Mbps |
|----------------------|---------|---------|---------|-------------------------|------------------------|-------------------------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

HP ProCurve MSM310 Access Point US (J9374A)

Radio characteristics: IEEE 802.11a/b/g

| Data rate | | | | IEEE 802.11g 54 Mbps | IEEE 802.11b 1 Mbps | |
|----------------------|---------|---------|---------|-------------------------|------------------------|----------|
| Receiver sensitivity | -87 dBm | -67 dBm | -87 dBm | -70 dBm | -87 dBm | -87 dBm |
| Transmit power | 18 dBm | 12 dBm | 18 dBm | 13 dBm | 18.5 dBm | 18.5 dBm |

Standards and protocols

(applies to all products in series)

Mobility

IEEE 802.11a High Speed Physical Layer in the 5

IEEE 802.11b Higher-Speed Physical Layer

Extension in the 2.4 GHz Band IEEE 802.11d Global Harmonization

IEEE 802.11g Further Higher Data Rate Extension in

the 2.4 GHz Band IEEE 802.11i Medium Access Control (MAC) Security Enhancements

| | HP ProCurve MSM317 Access Device US (J9422A) | HP ProCurve MSM317 Access Device WW (J9423A) |
|---|--|--|
| Ports | 5 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: half or full | 5 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: half or full |
| AP characteristics | | |
| Radios | Single (b/g) | Single (b/g) |
| Radio operation modes | Client access, Local mesh, Packet capture, RF security | Client access, Local mesh, Packet capture, RF security |
| AP operation modes | Controlled | Controlled |
| Wi-Fi Alliance Certification | b/g Wi-Fi Certified | b/g Wi-Fi Certified |
| Physical characteristics | | |
| Dimensions | $1.11(d) \times 2.8(w) \times 3(h)$ in. $(2.82 \times 7.11 \times 7.62 \text{ cm})$ | $3(d) \times 2.8(w) \times 1.11(h)$ in. $(7.62 \times 7.11 \times 2.82 \text{ cm})$ |
| Weight | 0.66 lb. (0.3 kg) | 0.33 lb. (0.15 kg) |
| Enclosure | Indoor | Indoor |
| Mounting | Designed for mounting in a standard wall outlet box: NEMA WD6-2002 (US), BS 4662:2006 (WW). The dimensions in the datasheet describe the front faceplate. | Designed for mounting in a standard wall outlet box: NEMA WD6-2002 (US), BS 4662:2006 (WW). The dimensions in the datasheet describe the front faceplate. |
| Environment | | |
| 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 | 5% to 90%, non-condensing | 5% to 90%, non-condensing |
| Non-operating/Storage temperature | -4°F to 176°F (-20°C to 80°C) | -4°F to 176°F (-20°C to 80°C) |
| Non-operating/Storage relative humidity | 5% to 90%, non-condensing | 5% to 90%, non-condensing |
| Electrical characteristics | | |
| Description | Powered Device (PD): The device will be powered by any IEEE 802.3af-compliant, prestandard IEEE 802.3at and select non-standard sources. | Powered Device (PD): The device will be powered by any IEEE 802.3af-compliant, prestandard IEEE 802.3at and select non-standard sources. |
| Notes | Power Sourcing Equipment (PSE): The designated PoE port will power IEEE 802.3af Class 1 and Class 2 devices. | Power Sourcing Equipment (PSE): The designated PoE port will power IEEE 802.3af Class 1 and Class 2 devices. |
| Frequency band and Operating channels | | |
| US | 2.412 - 2.462 GHz (channels) | |
| ww | | 2.412 - 2.472 GHz (channels) |
| Radio | FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; ARIB STD-T66; IDA Registration (Singapore); MIC approval (Korea); RCR STD-33; ARIB STD-T71 (Japan); EN 301 893 (EU) | FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; ARIB STD-T66; IDA Registration (Singapore); MIC approval (Korea); RCR STD-33; ARIB STD-T71 (Japan); EN 301 893 (EU) |
| Safety | UL 60950-1; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1 | UL 60950-1; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1 |
| Emissions | EN 55022 Class B; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, Class B | EN 55022 Class B; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15, Class B |
| RF Exposure | FCC Bulletin OET-65C; RSS-102 | FCC Bulletin OET-65C; RSS-102; EN 50385 |
| Notes | Ports: (switch) 4 10/100BASE-TX ports, RJ-45 jack on faceplate, 1 10/100BASE-TX port for uplink, RJ-45 jack or 110 punchdown block on rear of unit (pass-through), and 1 RJ-45 jack on faceplate and rear of unit. | Ports: (switch) 4 10/100BASE-TX ports, RJ-45 jack on faceplate, 1 10/100BASE-TX port for uplink, RJ-45 jack or 110 punchdown block on rear of unit (pass-through), and 1 RJ-45 jack on faceplate and rear of unit |
| Services | 3-year, parts only, global next-day advance exchange (UQ569E) 3-year, 4-hour onsite, 13x5 coverage for hardware (UQ570E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ568E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ571E) 1 Year Post Warranty Next Bus. Day Exchange (UQ572PE) 1 Year Post Warranty 4 hour response 13x5 Onsite Support (UQ585PE) 1 Year Post Warranty 4 hour response 24x7 Onsite HW Support (UQ586PE) 1 Year Post Warranty HW and SW 24x7 Phone Support (UQ587PE) | 3-year, parts only, global next-day advance exchange (UQ569E) 3-year, 4-hour onsite, 13x5 coverage for hardware (UQ570E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ568E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ571E) 1 Year Post Warranty Next Bus. Day Exchange (UQ572PE) 1 Year Post Warranty 4 hour response 13x5 Onsite Support (UQ585PE) 1 Year Post Warranty 4 hour response 24x7 Onsite HW Support (UQ586PE) 1 Year Post Warranty HW and SW 24x7 Phone Support (UQ587PE) |
| | Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. | Refer to the HP Web site at www.procurve.com/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. |

Specifications (continued)

HP ProCurve MSM317 Access Device US (J9422A)

HP ProCurve MSM317 Access Device WW (J9423A)

HP ProCurve MSM317 Access Device US (J9422A)

Radio characteristics: IEEE 802.11 b/g

IEEE IEEE 802.11b: 1, 802.11g: 6, 2, 5.5, 11 9, 12, 18, Mbps 24, 36, 48, 54 Mbps

Receiver sensitivity Transmit power

Data rate

Data rate

HP ProCurve MSM317 Access Device WW (J9423A)

Radio characteristics: IEEE 802.11 b/g

IEEE IEEE 802.11b: 1, 802.11g: 6, 2, 5.5, 11 9, 12, 18, Mbps 24, 36, 48, 54 Mbps

Receiver sensitivity Transmit power

Standards and protocols

(applies to all products in series)

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 802.11d Global Harmonization

IEEE 802.11g Further Higher Data Rate Extension in

the 2.4 GHz Band IEEE 802.11i Medium Access Control (MAC)

HP ProCurve MultiService Access Point Series accessories

HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM335 and MSM422 Power Supply (J9406A)

HP ProCurve 1-Port Power Injector (J9407A)

HP ProCurve MSM422 Access Point WW (J9359A)

HP ProCurve MSM335 and MSM422 Power Supply (J9406A)

HP ProCurve MSM335 Access Point WW (J9357A)

HP ProCurve MSM335 and MSM422 Power Supply (J9406A)

HP ProCurve MSM325 Access Point WW (J9373A)

HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (J9403A)

HP ProCurve MSM320 Access Point WW (J9364A)

HP ProCurve MSM320 RF sensor license (J9384A)

HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (J9403A)

HP ProCurve MSM310 Access Point WW (J9379A)

HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (J9403A)

HP ProCurve MSM422 Access Point US (J9358A)

HP ProCurve MSM335 and MSM422 Power Supply (J9406A)

HP ProCurve MSM335 Access Point US (J9356A)

HP ProCurve MSM335 and MSM422 Power Supply (J9406A)

HP ProCurve MSM325 Access Point US (J9369A)

HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (J9403A)

HP ProCurve MSM320 Access Point US (J9360A)

HP ProCurve MSM320 RF sensor license (J9384A) HP ProCurve MSM31x and MSM32x Power Supply (J9405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (J9403A)

HP ProCurve MSM310 Access Point US (J9374A)

HP ProCurve MSM31x and MSM32x Power Supply (19405A)

HP ProCurve MSM310/MSM320 AP Mounting Bracket (19403A)



HP ProCurve Access Points and Access Devices are Wi-Fi Certified, providing our customers with the assurance that these products have met and passed the rigorous interoperability testing preformed by the Wi-Fi Alliance Organization. See the Specifications section of this series for more information.

Technology for better business outcomes

To learn more, visit www.hp.com/go/procurve

© Copyright 2008-2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Intel, Core, Pentium, and Xeon are trademarks of Intel Corporation in the U.S. and other countries. Microsoft, Windows, Windows NT, and Windows Vista are U.S. registered trademarks of Microsoft Corporation.

