

HP V-M200 802.11n Access Point Series

Data sheet

Product overview

The HP V-M200 802.11n Access Point provides wireless connectivity for your expanding network. Take full advantage of the next-generation IEEE 802.11n standard with the V-M200 access point's dual-band capability while simultaneously supporting IEEE 802.11a or 802.11b/g devices. The new Web user interface makes the V-M200 access point easy to set up, yet retains key functionality to keep your sensitive data secure.

Key features

- IEEE 802.11a/b/g/n access point
- Single radio, dual band (2.4 GHz and 5 GHz)
- Independently managed
- Easy-to-use Web user interface
- Powered by 802.3af PoE or included power supply



Features and benefits

Management

- NEW Secure and easy-to-use Web UI:
 - Quick setup page: consolidates key settings into one page for simple and rapid configuration for common deployment scenarios
 - HTTPS secured management sessions: prevent management sessions from being observed on the network
- Integration with HP PCM: enables discovery and mapping via HP PCM, available as a free download from the Web; provides all the basic tools needed to handle a network effectively, along with a 60-day trial version of HP PCM+
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol provides easy mapping by network management applications
- Manager, operator privilege levels: provides read-only (operator) and read-write (manager) access levels for Web management

Connectivity

- NEW Fully IEEE 802.11n-compliant dual-band access point:
 - 2.4 GHz frequency band support: uses your IEEE 802.11n wireless clients alongside legacy IEEE 802.11b/g devices
 - 5 GHz frequency band support: operates your IEEE 802.11n and 802.11a devices in the 5 GHz spectrum, which has less interference from microwave ovens, Bluetooth® devices, and cordless phones
- IEEE 802.3af PoE-powered device (PD) option: 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
- Auto-MDIX: automatically adjusts for straight-through or crossover cables on the 10/100/1000 port
- Spanning Tree Protocol (IEEE 802.1D): prevents network loops

Mobility

- Four wireless communities: consolidates Quality of Service, security, and VLAN settings into one easy-to-manage identifier per SSID
- Service-class segmentation:
 - Up to four SSIDs (one per wireless community): allows administrator to identify multiple service sets for clients to access
- Up to four VLANs (one per wireless community): IEEE 802.1Q VLAN tagging provides security between workgroups
- Wireless community-based prioritization: allows the administrator to help ensure that key network traffic is prioritized by weighting specific wireless communities
- Auto Channel Select (ACS): helps reduce radio co-channel interference by automatically selecting an unoccupied radio channel
- Wireless Distribution System (WDS) modes:
- Access Point and WDS Bridge, Access Point Only, WDS Bridge Only, and Monitor: allow HP V-M200 802.11n Access Points to connect wirelessly to other HP V-M200 802.11n Access Points without a wired backbone; this is useful for extending the network across areas where no wired infrastructure exists
- Interoperability: meets Wi-Fi Alliance certifications, including IEEE 802.11n Wi-Fi and WPA2 to help provide multivendor interoperability
- Three external 3x3 MIMO omni-directional antennas: enable the antennas to be configured for improved radio coverage and performance
- Quality of Service management:
 - **IEEE 802.1p:** maps WMM prioritization to IEEE 802.1p queues on the wired network
- Wireless community-based prioritization: allows users to prioritize traffic based on wireless community (SSID)
- DiffServ: prioritizes data based on the traffic class

Security

• 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
- Layer 2 wireless client isolation

RADIUS-based MAC authentication:

authenticates a wireless client with a RADIUS server based on the MAC address of the client; this is useful for clients with minimal or no user interface

- 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
- Secure Sockets Layer (SSL): encrypts all HTTP traffic, allowing secure access to the browser-based management interface of the access point
- Local wireless bridge client traffic filtering: when enabled, prevents communication between wireless devices associated with the same access point
- **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"
- **Management password:** provides security so that only authorized access to the Web browser interface is allowed
- Wired Equivalent Privacy (WEP) using 64 and 128-bit encryption: provides backward compatibility for legacy clients
- Rogue AP detection: identifies all access points in range; known or trusted access points can be saved, allowing network administrators to identify unauthorized access points

Monitor and diagnostics

• 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
- Remote SYSLOG

Warranty and support

- Lifetime warranty: for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)*
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to <u>www.hp.com/networking/warranty</u> for details on the support provided and the period during which support is available
- **Software releases:** refer to <u>www.hp.com/networking/warranty</u> for details on the software releases provided and the period during which software releases are available for your product(s)

*Hardware warranty replacement for as long as you own the product, with next business day advance replacement (available in most countries) with a five-year hardware warranty replacement for the disk drive included with HP AllianceONE Services zl Module, HP Threat Management Services zl Module, HP PCM+ Agent with AllianceONE Services zl Module, and HP E-MSM765 zl Mobility Controller. For details, refer to the HP Software License, Warranty, and Support booklet at www.hp.com/networking/warranty.

Specifications

| | HP V-M200 802.11n Access Point (US) (J9467A) | HP V-M200 802.11n Access Point (WW) (J9468A) | | |
|--|--|--|--|--|
| 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); Media Type: Auto-MDIX; Duplex: 10Base-T/100Base-TX: half or full; 1000Base-T: full only | | |
| AP characteristics | | | | |
| Radios | Single (n/a/b/g) | Single (n/a/b/g) | | |
| Radio operation modes | Client access, Packet capture, Client bridge | Client access, Packet capture, Client bridge | | |
| AP operation modes | Autonomous | Autonomous | | |
| Wi-Fi Alliance Certification | a/b/g/n Wi-Fi Certified | a/b/g/n Wi-Fi Certified | | |
| Physical characteristics | | | | |
| Dimensions | 5.04(d) × 7.68(w) × 1.26(h) in. (12.8 × 19.5 × 3.2 cm) | 5.04(d) x 7.68(w) x 1.26(h) in. (12.8 x 19.5 x 3.2 cm) | | |
| Weight | 0.84 lb. (.39 kg) | 0.84 lb. (.39 kg) | | |
| Enclosure | Indoor | Indoor | | |
| 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 | 15% to 95% @ 104°F (40°C), non-condensing | 15% to 95% @ 104°F (40°C), 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 | 15% to 95% @ 149°F (65°C), non-condensing | 15% to 95% @ 149°F (65°C), non-condensing | | |
| Altitude | up to 15,000 ft. (4.6 km) | up to 15,000 ft. (4.6 km) | | |
| Acoustic | Power: 0 dB (no fan) | Power: 0 dB (no fan) | | |
| | | | | |
| Electrical characteristics Description | IEEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external power | 1EEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external powe | | |
| Description | supply | supply | | |
| Current | 0.7 A | 0.7 A | | |
| Maximum power rating | 8.4 W | 8.4 W | | |
| Antenna | External 2.4/5 GHz 3x3 MIMO omni-directional antennas | External 2.4/5 GHz 3x3 MIMO omni-directional antennas | | |
| Number of external antennas | 3 | 3 | | |
| | 5 | 5 | | |
| Frequency band and Operating channels US | 2.400 - 2.462 GHz (11 channels) 5.150 - 5250 GHz (4 channels) 5.725 - 5.825 GHz (5 channels) | | | |
| European Union | | 2.4 - 2.472 GHz (13 channels) | | |
| | | 5.150 - 5.240 GHz (4 channels) | | |
| Rest of World (Actual channels designated by selecting country in UI) | | 2.400 - 2.472 GHz (13 channels) 5.150 - 5.250 GHz (4 channels) 5.250 - 5.350 GHz (4 channels) 5.470 - 5.700 GHz (11 channels) 5.725 - 5.865 GHz (7 channels) | | |
| Radio | FCC Part 15.247; FCC Part 15.407 (no DFS) | EN 300 328; EN 301-489-1; EN 301-489-17; EN 301 893 (EU) no DFS; RSS-210, Issue 7; RSS-Gen, Issue 2; NCCLP0002 (Taiwan) | | |
| Safety | UL 60950-1 | UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1 | | |
| Emissions | CISPR 22 Class B; EN 55022 Class B; EN 60601-1-2; ICES-003 Class B; IEC/EN 61000-3-2; IEC/EN 61000-3-3; FCC Part 15, Class B | CISPR 22 Class B; EN 55022 Class B; EN 60601-1-2; ICES-003 Class B; IEC/EN 61000-3-2; IEC/EN 61000-3-3; FCC Part 15, Class B | | |
| RF Exposure | FCC Bulletin OET-65C | RSS-102; EN 50385; EC Council Recommendation 1999/519/EC; ARPANS/ EMR Limits (May 2002) | | |
| Features | Single Radio IEEE 802.11n for high-throughput applications and IEEE 802.11a/b/g for legacy support - IEEE 802.11a/b/g/n Wi-Fi Certified (dual streams) - Dual-band support (2.4 and 5 GHz) | Single Radio IEEE 802.11n for high-throughput applications and IEEE 802.11a/b/g for legacy support - IEEE 802.11a/b/g/n WiFi Certified (dual streams) - Dual-band support (2.4 and 5 GHz) | | |
| Services | Refer to the HP website at <u>www.hp.com/networking/services</u> 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 website at <u>www.hp.com/networking/services</u> 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. | | |

HP V-M200 802.11n Access Point Series

Specifications (continued)

| | | н | P V-M200 802.1 | 1n Access Point (US) (J9467A) | Н | P V-M200 802.11n Acco | ess Point (WW) (J9468A) | |
|--|-------------------|-------------------|-------------------|-------------------------------|---|-----------------------|-------------------------|--|
| Radio characteristic IEEE 802.11n 5 GHz | | | | | | | | |
| Data rate | MCS0 Mbps | MCS7 Mbps | MCS8 Mbps | MCS15 Mbps | | | | |
| Receiver sensitivity Transmit power | -88 dBm 17 dBm | -70 dBm 12 dBm | -88 dBm 17 dBm | -69 dBm 12 dBm | | | | |
| • | | | | | | | | |
| IEEE 802.11n 5 GHz | : @ 20 MHz | | | | | | | |
| Data rate | MCS0 Mbps | MCS7 Mbps | MCS8 Mbps | MCS15 Mbps | | | | |
| Receiver sensitivity | -94 dBm | -75 dBm | -92 dBm | -72 dBm | | | | |
| Transmit power | 17 dBm | 12 dBm | 17 dBm | 12 dBm | | | | |
| IEEE 802.11n 2.4 G | Hz @ 20 MHz | | | | | | | |
| Data rate | MCS0 Mbps | MCS7 Mbps | MCS8 Mbps | MCS15 Mbps | | | | |
| Receiver sensitivity | -94 dBm | -77 dBm | -94 dBm | -75 dBm | | | | |
| Transmit power | 19 dBm | 11 dBm | 19 dBm | 11 dBm | | | | |
| IEEE 802.11a | | | | | | | | |
| Data rate | 6 Mbps | 54 Mbps | | | | | | |
| Receiver sensitivity | -92 dBm | -76 dBm | | | | | | |
| Transmit power | 17 dBm | 13 dBm | | | | | | |
| IEEE 802.11b | | | | | | | | |
| Data rate | 1 Mbps | 11 Mbps | | | | | | |
| Receiver sensitivity | -94 dBm | -91 dBm | | | | | | |
| Transmit power | 19 dBm | 19 dBm | | | | | | |
| IEEE 802.11g | | | | | | | | |
| Data rate | 6 Mbps | 54 Mbps | | | | | | |
| Receiver sensitivity | -92 dBm | -76 dBm | | | | | | |
| Transmit power | 17 dBm | 13 dBm | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Standards and protocols (applies to all products in series)

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 IEEE 802.11n WLAN Enhancements for Higher Throughput

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QoS/CoS IEEE 802.1P (CoS)

HP V-M200 802.11n Access Point Series

Specifications (continued)

| | HP V-M200 802.11n | Access Point (US) (J9467A) | HP V-M200 802.11n Access Point (WW) (J9468A) | | |
|----------------------------|---------------------|----------------------------|--|--------------------|--|
| HP V-M200 802.11n Access I | Point (US) (J9467A) | | | | |
| MCS Index | 800 | 0 nS | 400 | 0 nS | |
| | 20 MHz Rate (Mbps) | 40 MHz Rate (Mbps) | 20 MHz Rate (Mbps) | 40 MHz 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 V-M200 802.11n Access Point (WW) (J9468A)

| MCS Index | 800 |) nS | 400 |) nS |
|-----------|--------------------|--------------------|--------------------|--------------------|
| | 20 MHz Rate (Mbps) | 40 MHz Rate (Mbps) | 20 MHz Rate (Mbps) | 40 MHz 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 V-M200 802.11n Access Point Series accessories

Power Supply HP 1-Port Power Injector (J9407A)



HP 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.

To learn more, visit www.hp.com/networking

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