Overview

#### Models

HP M200 802.11n Access Point (US)
HP M200 802.11n Access Point (WW)

J9467A J9468A

#### **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

#### **Product overview**

The HP 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 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 M200 access point easy to set up, yet retains key functionality to keep your sensitive data secure.

#### **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



#### Overview

- Four wireless communities: consolidates Quality of Service, security, and VLAN settings into one easy-to-manage identifier per
- Service-class segmentation:
  - O 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 M200 802.11n Access Points to connect wirelessly to other HP 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:
  - O 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:
  - O IEEE 802.1X authentication using EAP-SIM, EAP-FAST, EAP-TLS, EAP-TTLS, and PEAP
  - O MAC address authentication using local or RADIUS access lists
  - O RADIUS AAA using EAP-MD5, PAP, CHAP, and MS-CHAPv2
  - O 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 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:
  - O Client event log records association, authentication, and DHCP events
  - O Packet capture tool for Ethernet and IEEE 802.11 interfaces (PCAP format)
  - O Data rate matrix



#### Overview

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: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- **Software releases**: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)



<sup>\*</sup> 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.

### Configuration

Build To Order: BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

HP M200 802.11n Access Point

J9467A

• 1 RJ-45 autosensing 10/100 ports

**See Configuration** Note:1

HP M200 802.11n Access Point (WW)

J9468A

• 1 RJ-45 autosensing 10/100 ports

See Configuration Note:2

HP M220 802.11n AM Access Point

J9798A

• 1 RJ-45 autosensing 10/100 ports

**See Configuration** Note:1

HP M220 802.11n WW Access Point

J9799A

• 1 RJ-45 autosensing 10/100 ports

See Configuration Note:2

#### **Configuration Rules:**

Note 1

Only available in US. (Warning in Clic only)

Note 2 Not available US and Israel. (Warning in Clic only)

## **Power Supplies**

None

## **Access Point Options**

#### **External Power Supplies**

**HP 1-port Power Injector** J9407B

See Configuration

Note:1

**HP 1-port Power Injector** J9407B

**See Configuration** 

Note:1

#### **Configuration Rules:**

Localization required. (See Localization Menu) Note 1



## **HP M200-802.11n Access Point Series**

# QuickSpecs

Configuration

#### **Adapters**

HP Dual Band 802.11n Wireless USB Adapter

JD039A



#### **Technical Specifications**

HP M200 802.11n Access Point (US) (J9467A)

Ports 1 RJ-45 autosensing 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 (a/b/g/n)

AP operation modes Autonomous

Wi-Fi Alliance a/b/g/n Wi-Fi Certified

Certification\*

\* 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.

**Physical characteristics Dimensions** 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)

**Enclosure** Indoor

**Environment Operating temperature** 32°F to 104°F (0°C to 40°C)

Operating relative 15% to 95% @ 104°F (40°C), noncondensing

humidity

Nonoperating/Storage

temperature

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage

relative humidity

15% to 95% @ 149°F (65°C), noncondensing

Altitude up to 15,000 ft. (4.6 km)

Acoustic Power: 0 dB (no fan)

**Electrical characteristics Description** IEEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external power

supply

**Current** 0.7 A **Maximum power rating** 8.4 W

**Antenna** External 2.4/5 GHz 3x3 MIMO omni-directional antennas

Number of external 3

antennas

**US** 2.400 - 2.462 GHz (11 channels)

5.150 - 5250 GHz (4 channels) 5.725 - 5.825 GHz (5 channels)

Radio FCC Part 15.247; FCC Part 15.407 (no DFS)

**Safety** UL 60950-1

Frequency band and

**Operating channels** 

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

**RF Exposure** FCC Bulletin OET-65C



### **Technical Specifications**

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)

**Services** 1-year, 4-hour onsite, 13x5 coverage for hardware (HR643E)

1-year, 4-hour onsite, 24x7 coverage for hardware (HR644E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR647E)

1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates

(HR645E)

5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS829E)

Refer to the HP website at: www.hp.com/networking/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.

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 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

**AP characteristics Radios** Single (n/a/b/g)

AP operation modes Autonomous

**Wi-Fi Alliance** a/b/g/n Wi-Fi Certified

Certification\*



### **Technical Specifications**

\* 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.

**Physical characteristics Dimensions** 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)

**Enclosure** Indoor

**Environment Operating temperature** 32°F to 104°F (0°C to 40°C)

Operating relative

humidity

15% to 95% @ 104°F (40°C), non-condensing

Nonoperating/Storage

temperature

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage

relative humidity

15% to 95% @ 149°F (65°C), non-condensing

Altitude up to 15,000 ft. (4.6 km)

Acoustic Power: 0 dB (no fan)

**Electrical characteristics Description** 1EEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external power

supply

**Current** 0.7 A **Maximum power rating** 8.4 W

Antenna External 2.4/5 GHz 3x3 MIMO omni-directional antennas

**Number of external** 

antennas

3

Frequency band and Operating channels

**European Union** 2.4 - 2.472 GHz (13 channels)

5.150 - 5.240 GHz (4 channels) 2.400 - 2.472 GHz (13 channels)

Rest of World (Actual channels designated by

selecting country in UI)

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** 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; 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

RF Exposure RSS-102; EN 50385; EC Council Recommendation 1999/519/EC; ARPANSA 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)

**Services** 1-year, 4-hour onsite, 13x5 coverage for hardware (HR643E)

1-year, 4-hour onsite, 24x7 coverage for hardware (HR644E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR647E)

1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates

(HR645E)



MCS15 Mbps

# QuickSpecs

### **Technical Specifications**

**Data rate** 

5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS829E)

Refer to the HP website at: www.hp.com/networking/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.

MCS8 Mbps

MCSO Mbps

Receiver sensitivity	-88 dBm	-70 dBm	-88 dBm	-69 dBm
Transmit power	17 dBm	12 dBm	17 dBm	12 dBm
Radio characteristics: IEEE	802.11n 5 GHz @ 20 MHz			
Data rate	MCSO 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
Radio characteristics: IEEE	802.11n 2.4 GHz @ 20 MH	z		
Data rate	MCSO 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
Radio characteristics: IEEE	802.11a/b/g			

MCS7 Mbps

	IEEE 802.11a	IEEE 802.11a	IEEE 802.11b	IEEE 802.11b	IEEE 802.11g	IEEE 802.11g
Data rate	6 Mbps	54 Mbps	1 Mbps	11 Mbps	6 Mbps	54 Mbps
Receiver sensitivity	-92 dBm	-76 dBm	-94 dBm	-91 dBm	-92 dBm	-76 dBm
Transmit power	17 dBm	13 dBm	19 dBm	19 dBm	17 dBm	13 dBm

#### Standards and protocols Mobility

(applies to all products in series)

(applies to all products in 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

#### QoS/CoS

IEEE 802.1P (CoS) RFC 2474 DSCP DiffServ



## **Technical Specifications**

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 M200-802.11n Access Point Series

# QuickSpecs

### Accessories

HP M200-802.11n Access Power Supply

**Point Series accessories** HP 1-Port Power Injector

J9407A

**Wireless Card And Adapters** 

HP Dual Band 802.11n Wireless USB Adapter

JD039A



#### **Accessory Product Details**

**NOTE:** Details are not available for all accessories. The following specifications were available at the time of publication.

UD4 1 D 1 -1 1	Object of the constitute.	<b>n.</b>	574(1) 225(1) 422(1): (44.5.6.24)
HP 1-port Power Injector (J9407A)	Physical characteristics	Dimensions	5.71(d) x 2.36(w) x 1.22(h) in. (14.5 x 6 x 3.1 cm)
		Weight	1 lb. (0.45 kg)
	Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
		Operating relative humidity	5% to 93%, noncondensing
		Nonoperating/Storage temperature	-4°F to 158°F (-20°C to 70°C)
		Nonoperating/Storage relative humidity	5% to 95%, noncondensing
		Altitude	up to 10,000 ft. (3 km)
	<b>Electrical characteristics</b>	Voltage	100-240 VAC
		Current	0.3/0.2 A
		Frequency	50/60 Hz
		Notes	IEEE 802.3af compliant
	Safety	UL 60950; EN 60950	

**Emissions** EN 55024; EN 55022 (CISPR 22) Class B with FTP Cabling; FCC Part 15, Class B

with FTP cabling

The 1-port power converter has 1 AC power cord input, 1 RJ-45 10/100/1000 **Notes** 

> Mbps port for data coming from the network infrastructure, and 1 RJ-45 for data plus IEEE 802.3af-compliant PoE for Gigabit Ethernet to power the

access point.

**Services** Refer to the HP website at: www.hp.com/networking/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.

HP Dual Band 802.11n Wireless USB Adapter

(JD039A)

**Notes** 

System requirements: Computer with USB 2.0 port. Drivers support the following operating systems: Windows 2000, Windows XP, Windows Vista®, and Windows 7.

Standards conformance: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, WMM, and Wi-Fi Certified Security: WPA2-Enterprise, WPA2-Personal, WPA-Enterprise, WPA-Personal, AES/TKIP, WEP 64-/128-bit encryption, Wi-Fi Protected Setup (WPS), and PIN and PBC modes IEEE 802.1X EAP types: EAP-TLS, EAP-TTLS/MSCHAPv2, PEAPv0/EAP-MSCHAPv2, PEAPv1/EAP-GTC, and EAP-SIM Antennas: 2 internal: 2T, 2R Data rates supported: 802.11n: MCS 0 to 15 for HT20MHz; MCS 0 to 15 for HT40MHz; 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps; 802.11b: 11, 5.5, 2, and 1 Mbps

Regulatory/agency approvals. Safety: UL/CSA60950-1,EN/IEC60950-1; radio: FCCPart15.247, FCC Part15.407, RSS-210, EN300 328, and EN301 893; EMC: EN301 489-1, EN301 489-17; SAR: FCC OET Bulletin 65 Supplement C, RSS-

102, EN50392

Frequency band USA/Canada: 2.412-2.462 GHz, 5.15-5.8 GHz; EU: 2.412-2.472



#### **Accessory Product Details**

Services

GHz, 5.15-5.8 GHz (varies by country)

Modulation technique 802.11b: DSSS (Direct Sequence Spread Spectrum; 802.11a/802.11g: OFDM (Orthogonal Frequency Division Multiplexing) and

DSSS Media Access Protocol: CSMA/CA with ACK

Environmental range: Operating temperature: 0 to 45°C (32 to 113°F).

Package contents: Wireless LAN USB Adapter, Quick Install Guide, and CD-ROM Also sold as the 3Com Wireless 11n Dual Band USB Adapter.

3-year, 4-hour onsite, 13x5 coverage for hardware (UW869E)

3-year, 4-hour onsite, 24x7 coverage for hardware (UW872E)

3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW875E)

3-year, 24x7 SW phone support, software updates (UW878E)

1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR705E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR706E)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR707E)

4-year, 4-hour onsite, 13x5 coverage for hardware (UW870E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW873E)

4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW876E)

4-year, 24x7 SW phone support, software updates (UW879E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UW871E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW874E)

5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW877E)

5-year, 24x7 SW phone support, software updates (UW880E)

3 Yr 6 hr Call-to-Repair Onsite (UW881E) 4 Yr 6 hr Call-to-Repair Onsite (UW882E) 5 Yr 6 hr Call-to-Repair Onsite (UW883E)

1-year, 6 hour Call-To-Repair Onsite for hardware (HR709E) 1-year, 24x7 software phone support, software updates (HR708E)

Refer to the HP website at: <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> 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.

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

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