Hewlett Packard Enterprise

Data sheet

HPE OfficeConnect M220 802.11n Access Point Series

Key features

- IEEE 802.11a/b/g/n Access Point (AP)
- Single-radio, dual-band (2.4GHz or 5GHz)
- Simplified wireless LAN administration with clustering technology
- Powered by IEEE 802.3af PoE or included power supply
- Limited Lifetime Warranty

Product overview

HPE OfficeConnect 802.11n Access Point Series are cost effective access points ideal for small businesses requiring multiple access points for wireless coverage. They support standalone operation as well as "clustering" of up to 16 HPE M220 Access Points to accommodate wireless coverage of mid-size locations. M220 Access Points are dual-band, single-radio devices supporting high-speed wireless networking at 5GHz or 2.4GHz. Dual-band operation gives you flexibility to use the less congested 5GHz spectrum for better wireless performance, better user experience and faster delivery of mobile applications. They are fully compatible with the high-speed IEEE 802.11n wireless standard and backward-compatible for legacy IEEE 802.11a/b/g support.

With clustering technology, a configuration change on one access point propagates across all HPE OfficeConnect M220 Access Points so changes are uniform throughout the network for consistent security and uninterrupted wireless client roaming. Clustering technology requires no wireless controller or additional hardware, enabling you to keep your network easily accessible. The series is part of the OfficeConnect portfolio of Hewlett Packard Enterprise small business wireless networking products.

HPE OfficeConnect M220 802.11n Access Point Series includes a Limited Lifetime Warranty. This warranty provides advance hardware replacement with next business day shipment in most countries, limited 24x7 telephone support available from HPE for the first 90 days, and limited electronic and business hours telephone support is available from HPE for the entire warranty period.

Features and benefits

Management

- Centralized wireless LAN management
  - Simplified access point management

    Configuration parameters enabled on one AP pass to all members (up to 16 APs) of the cluster, reducing the need to configure each AP individually.
  - Auto channel planning

    APs in a cluster are automatically assigned to a channel that reduces interference between adjacent APs.
  - Client connection list

    Access any member of the cluster to view information about clients connected to any clustered AP.
- 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.
- SNMP v1 and v2c

  Facilitates management of the AP, as the device can be discovered and monitored from an SNMP management station.

Connectivity

- 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 eliminate the time and cost involved in supplying local power at each access point location.
- Spanning Tree Protocol (IEEE 802.1D)

  Prevents network loops.
- IPv6 support

  The HPE OfficeConnect M220 802.11n Access Point provides native support for IPv6, the newest version of the Internet Protocol, as well as the previous IPv4 standard.

Mobility

- Service-class segmentation
  - Up to 8 SSIDs

    Allows administrator to identify multiple service sets for clients to access.
  - Up to 8 VLANs

    IEEE 802.1Q VLAN tagging provides security and traffic control between workgroups.
  - SSID to VLAN mapping

    Permits segmenting traffic on each SSID to a specific VLAN.
- Auto channel select

  Helps reduce radio co-channel interference by automatically selecting an unoccupied radio channel.
- 2x3:2 MIMO support

  Provides up to 300 Mbps performance and supports a maximum of 64 wireless clients per AP.
- Two internal MIMO omni-directional antennas

  Provides excellent coverage through use of embedded high-gain antennas (4.56 dBi antenna at 2.4 GHz and 5.43 dBi antenna at 5 GHz); no need for the added cost of external antennas.
- Wireless Distribution System (WDS)

  Allows HPE OfficeConnect M220 802.11n Access Points to connect wirelessly to other HPE OfficeConnect M220 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.

Security

- Rogue AP detection

  Identifies all APs in range; known or trusted access points can be saved, allowing network administrators to identify unauthorized APs.
- Secure Sockets Layer (SSL)

  Encrypts all HTTP traffic, allowing secure access to the browser-based management interface of the access point.
- Management password

  Provides security so that only authorized access to the Web browser interface is allowed.
- RADIUS-based user authentication

  Authenticates a user with a RADIUS server based on user credentials.

- 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.

- RADIUS-based VLAN assignment

  Places wireless client on RADIUS-assigned VLAN.

- Closed system

  Restricts broadcast of SSID as a security measure to conceal presence of the wireless network.

- Wired Equivalent Privacy (WEP) using 64- and 128-bit encryption

  Provides backward compatibility for legacy clients.

- Choice of IEEE 802.11i, 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.

- Local wireless bridge client traffic filtering

  Prevents communication between wireless devices associated with the same access point.

Warranty and support

- Limited Lifetime Warranty

  This series comes with a Limited Lifetime Warranty providing advance hardware replacement with next business day shipment in most countries, 24x7 phone support available for the first 90 days, and electronic and business hours phone support for the entire warranty period. See **hpe.com/networking/warrantysummary** for full warranty and support information included with your product purchase.

HPE OfficeConnect M220 802.11n Access Point Series

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)	HPE OfficeConnect M220 802.11n WW Access Point (J9799A)
I/O ports and slots	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	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 (built-in)	802.11a/b/g/n	802.11a/b/g/n
Radio operation modes	Client access, Client bridge	Client access, 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
Antenna	Internal 2.4/5 GHz MIMO omni-directional antennas	Internal 2.4/5 GHz MIMO omni-directional antennas
Number of internal antennas	2	2
Physical characteristics		
Dimensions	7.62(w) x 5(d) x 1.5(h) in (19.35 x 12.7 x 3.81 cm)	7.62(w) x 5(d) x 1.5(h) in (19.35 x 12.7 x 3.81 cm)
Weight	0.75 lb (0.34 kg)	0.75 lb (0.34 kg)
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), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
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), noncondensing	15% to 95% @ 149°F (65°C), noncondensing
Altitude	up to 15,000 ft (4.6 km)	up to 15,000 ft (4.6 km)
Acoustic	Low-speed fan: 0 dB, High-speed fan: 0 dB (no fan)	Low-speed fan: 0 dB, High-speed fan: 0 dB (no fan)
Electrical characteristics		
Description	IEEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external power supply	IEEE 802.3af PoE Compliant or included 110-240 V 50/60 Hz external power supply
AC voltage	100 - 240 VAC	100 - 240 VAC
Current	0.4 A	0.4 A
Maximum power rating	5.3 W	5.3 W
PoE power	7 W PoE	7 W PoE
	Notes: PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of a External Power Supply (EPS). 5.3 watts is the maximum power draw when the device is used with the included power adapter.	**Notes:** PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of a External Power Supply (EPS). 5.3 watts is the maximum power draw when the device is used with the included power adapter.
Frequency band and operating channels		
US	2.412 - 2.462 GHz (11 channels) 5.180 - 5.240 GHz (4 channels) 5.745 - 5.825 GHz (5 channels)	
European Union		2.412 - 2.472 GHz (13 channels) 5.180 - 5.240 GHz (4 channels) 5.500 - 5.700 GHz (8 channels)
Rest of World (Actual channels designated by selecting country in UI)		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) 5.745 - 5.825 GHz (5 channels)

HPE OfficeConnect M220 802.11n Access Point Series (continued)

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)	HPE OfficeConnect M220 802.11n WW Access Point (J9799A)
Radio	FCC Part 15.247; FCC Part 15.407 (no DFS); RSS-210, Issue 8; RSS-Gen, Issue 3	EN 300 328; EN 301-489-1; EN 301-489-17; EN 301 893 (EU); NCCLP0002 (Taiwan)
Safety	UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	EN 60950-1; IEC 60950-1 (ed.2); IEC 60950-1 (ed.2): am1
RF Exposure	Canada RSS-102; FCC Bulletin OET-65 Supplement C	EN 50385
Services	Refer to the Hewlett Packard Enterprise website at **hpe.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 Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at **hpe.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 Hewlett Packard Enterprise sales office.

HPE OfficeConnect M220 802.11n Access Point Series (continued)

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)		HPE OfficeConnect M220 802.11n WW Access Point (J9799A)	
Radio characteristics: **HPE OfficeConnect M220 802.11n AM Access Point (J9798A)**				
IEEE 802.11n 5 GHz @ 20 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-86 dBm	-67 dBm	-86 dBm	-68 dBm
Transmit power	15 dBm	11 dBm	15 dBm	11 dBm
IEEE 802.11n 5 GHz @ 40 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-83 dBm	-64 dBm	-84 dBm	-65 dBm
Transmit power	15 dBm	11 dBm	15 dBm	11 dBm
IEEE 802.11n 2.4 GHz @ 20 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-87 dBm	-69 dBm	-86 dBm	-68 dBm
Transmit power	17 dBm	13 dBm	17 dBm	13 dBm
IEEE 802.11n 2.4 GHz @ 40 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-84 dBm	-65 dBm	-84 dBm	-65 dBm
Transmit power	17 dBm	13 dBm	17 dBm	13 dBm
IEEE 802.11a				
Data rate	6 Mbps	54 Mbps		
Receiver sensitivity	-86 dBm	-71 dBm		
Transmit power	15 dBm	11 dBm		
IEEE 802.11b				
Data rate	1 Mbps	11 Mbps		
Receiver sensitivity	-96 dBm	-87 dBm		
Transmit power	17 dBm	17 dBm		
IEEE 802.11g				
Data rate	6 Mbps	54 Mbps		
Receiver sensitivity	-87 dBm	-72 dBm		
Transmit power	17 dBm	13 dBm		

HPE OfficeConnect M220 802.11n Access Point Series (continued)

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)		HPE OfficeConnect M220 802.11n WW Access Point (J9799A)	
Radio characteristics: **HPE OfficeConnect M220 802.11n WW Access Point (J9799A)**				
IEEE 802.11n 5 GHz @ 20 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-86 dBm	-67 dBm	-86 dBm	-68 dBm
Transmit power	15 dBm	11 dBm	15 dBm	11 dBm
IEEE 802.11n 5 GHz @ 40 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-83 dBm	-64 dBm	-84 dBm	-65 dBm
Transmit power	15 dBm	11 dBm	15 dBm	11 dBm
IEEE 802.11n 2.4 GHz @ 20 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-87 dBm	-69 dBm	-86 dBm	-68 dBm
Transmit power	17 dBm	13 dBm	17 dBm	13 dBm
IEEE 802.11n 2.4 GHz @ 40 MHz				
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-84 dBm	-65 dBm	-84 dBm	-65 dBm
Transmit power	17 dBm	13 dBm	17 dBm	13 dBm
IEEE 802.11a				
Data rate	6 Mbps	54 Mbps		
Receiver sensitivity	-86 dBm	-71 dBm		
Transmit power	15 dBm	11 dBm		
IEEE 802.11b				
Data rate	1 Mbps	11 Mbps		
Receiver sensitivity	-96 dBm	-87 dBm		
Transmit power	17 dBm	17 dBm		
IEEE 802.11g				
Data rate	6 Mbps	54 Mbps		
Receiver sensitivity	-87 dBm	-72 dBm		
Transmit power	17 dBm	13 dBm		

HPE OfficeConnect M220 802.11n Access Point Series (continued)

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)		HPE OfficeConnect M220 802.11n WW Access Point (J9799A)	
HPE OfficeConnect M220 802.11n AM Access Point (J9798A)				
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

HPE OfficeConnect M220 802.11n Access Point Series (continued)

SPECIFICATIONS	HPE OfficeConnect M220 802.11n AM Access Point (J9798A)		HPE OfficeConnect M220 802.11n WW Access Point (J9799A)	
15	130	270	144.4	300
HPE OfficeConnect M220 802.11n WW Access Point (J9799A)				
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

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