# QuickSpecs

### Overview

# HPE OfficeConnect M220 802.11n Access Point Series



### **Models**

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

### **Key features**

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

# **Product overview**

HPE OfficeConnect M220 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 access point to accommodate wireless coverage of mid-size locations. HPE OfficeConnect 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.



### **Overview**

HPE OfficeConnect M220 802.11n Access Point Series includes a Limited Lifetime Warranty. This warranty includes 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 (clustering)
  - Simplified access point management
    - configuration parameters enabled on one access point pass to all members (up to 10 APs) of the cluster, eliminating the need to individually configure each AP
  - Auto channel planning access points 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

### 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 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
- 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

### **Overview**

• 2x3:2 MIMO support

provides up to 300 Mbps performance and supports a maximum of 64 wireless clients per AP.

### • 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 **http://www.hpe.com/networking/warrantysummary** for full warranty and support information included with your product purchase.

# 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.

### **BTO Models**

	ect M220 802.11n (AM) Access Point autosensing 10/100 ports	J9798A See Configuration <b>NOTE:1, 3</b>
No Power Cord • No Loca	lized Power Cord Selected	J9798A#AC3
	ect M220 802.11n (WW) Access Point autosensing 10/100/1000 ports	J9799A See Configuration <b>NOTE:2, 3</b>
No Power Cord • No Loca	lized Power Cord Selected	J9799A#AC3
Configuration R	ules:	
Note 1	Only available in AMS. (Warning in Clic only)	
Note 2	Not available in AMS or Japan. (Warning in Clic only)	
Note 3	Localization required. (See Localization Menu)	
Power Supp	lies	

# **Access Point Options**

### **External Power Supplies**

HP 1-port Power Injector

### **Configuration Rules:**

Note 1 Localization required. (See Localization Menu)

J9407B See Configuration **NOTE:1** 

#### HPE OfficeConnect M220 802.11n (AM) Access Point (J9798A)

	002.1111 (API) Access Pol	
Ports	5	0/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, ASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or
AP characteristics	Radios	802.11a/b/g/n
	Radio operation modes	Client access, Client bridge
	AP operation modes	Autonomous
	Wi-Fi Alliance Certification	a/b/g/n Wi-Fi Certified
Physical characteristics	Dimensions	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)
	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), noncondensing
	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	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
	Voltage	100 - 240 VAC, rated
	Current	0.4 A
	Maximum power rating	4.8 W
	PoE power	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.
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)
Radio	FCC Part 15.247; FCC Part	15.407 (no DFS); RSS-210, Issue 8; RSS-Gen, Issue 3
Safety	UL 60950-1 2nd Edition; C	SA C22.2 No. 60950-1-07 2nd Edition
RF Exposure	Canada RSS-102; FCC Bull	etin OET-65 Supplement C
Services	details on the service-leve	ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for I descriptions and product numbers. For details about services and response contact your local Hewlett Packard Enterprise sales office

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
<b>IEEE 802.11n 5 GHz @ 40</b>	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
<b>IEEE 802.11n 2.4 GHz @ 2</b>	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
<b>IEEE 802.11n 2.4 GHZ @</b> 4	40 MHz			
Data rate	MCS 0 Mbps	MSC 7 Mbps	MSC 8 Mbps	MSC 15 Mbps
Receiver sensitivity	-84 dBm	-65 dBm	-86 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 (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
15	130	270	144.4	300

#### HPE OfficeConnect M220 802.11n (WW) Access Point (J9799A)

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

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AP characteristics	Radios	802.11a/b/g/n
	Radio operation modes	Client access, Client bridge
	AP operation modes	Autonomous
	Wi-Fi Alliance	a/b/g/n Wi-Fi Certified
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	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	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)

Radio	FCC Part 15.247; FCC Part 15.407 (no DFS); RSS-210, Issue 8; RSS-Gen, Issue 3
Safety	UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition
<b>RF Exposure</b>	Canada RSS-102; FCC Bulletin OET-65 Supplement C
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> 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

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IEEE 802.11g				
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# Summary of Changes

Date	Version History	Action	Description of Change:
01-Aug-2016	From Version 6 to 7	Changed	Adding #AC3 Option on Configuration section.
			Minor edits on Overview and Technical Specifications.
06-May-2016	From Version 5 to 6	Changed	Document name changed to HPE OfficeConnect M220 802.11n Access Point Series. Changes made on technical
			Specifications and Overview. SKU descriptions updated.
01-Dec-2015	From Version 4 to 5	Changed	Updated Overview and Technical Specifications
01-Dec-2014	From Version 3 to 4	Changed	Warranty and support updated
18-Aug-2014	From Version 2 to 3	Changes	Content Edits
16-Oct-2013	From Version 1 to 2	Changed	Updated the specifications for both models, removing external antennas.

# **Summary of Changes**



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