Models

HP MSM310 Access Point (US)   J9374B
HP MSM310 Access Point (WW)   J9379B
HP MSM310 Access Point (JP)   J9524B

Key features

- Single radio
- Intelligent traffic forwarding
- Self-healing, advanced mesh capabilities
- Client access
- Indoor industrial enclosures

Product overview

HP offers intelligent single and dual radio access points designed to provide reliable, easy-to-use wireless connectivity across networks. All HP MSM access points can be managed by any HP MSM controllers and the HP RF Manager for the RF security sensors. All HP MSM access points can also work in autonomous mode. HP MSM access points are IEEE 802.3af compliant and require a single Power over Ethernet (PoE) cable drop or can be powered directly via a power adaptor. HP offers a full range of both indoor and outdoor MSM access points.

Features and benefits

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, and DiffServ
  - Wi-Fi MultiMedia (WMM), IEEE 802.11e EDCF, and Service-Aware priority assigned by Virtual Service Communities (VSC)
  - Maximum VoIP call capacity: 12 active calls on IEEE 802.11a/b/g/n
- **Network management**
  - Fully manageable using HP PCM 3.0 AU1 and HP Mobility Manager 3.0 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 a 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

Overview

- ○ Provides configurable background rogue scanning
- ○ Automatically adjusts transmit power to reduce interference

Connectivity

- **Auto-MDIX**
  automatically adjusts for straight-through or crossover cables on all 10/100 ports
- **IEEE 802.3af Power over Ethernet (PoE) 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

Mobility

- **Anywhere, anytime wireless coverage**
  - ○ Single radio IEEE 802.11a/b/g access points
  - ○ 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 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 can be mapped to separate IEEE 802.1Q VLANs
  - ○ WMM and/or WMM-PS
  - ○ 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
- **Auto Channel Select** (ACS)
  helps reduce radio co-channel interference by automatically selecting the radio channel with the least interference
- **MSM325 and MSM335 with HP RF sensor license Included**
  are ready, out of the box, to function as an RF monitor for the HP RF Manager IDS/IPS system

Security

- **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**
  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) MD5, 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

Overview

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; to reach our support centers, refer to
  www.hp.com/networking/contact-support; for details on the duration of support provided with your product purchase, refer
  to **www.hp.com/networking/warrantysummary**
- **Software releases**
  to find software for your product, refer to **www.hp.com/networking/support**; for details on the software releases available
  with your product purchase, refer to **www.hp.com/networking/warrantysummary**

†HP warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller and HP Survivable Branch Communication zl Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at www.hp.com/networking/warranty.

Configuration

HP MSM-802.11a/b/g Access Point Series accessories

Power Supply	HP MSM31x/MSM32x Power Supply	J9405A See Configuration Note:1
	HP 1-Port Power Injector	J9407B See Configuration Note:1
Mounting Kit	HP MSM310/MSM320 Access Point Mounting Bracket	J9403A
External Antenna	HP 5 dBi Indoor/Outdoor Omnidirectional Antenna	J8441A
	HP 8 dBi Outdoor Omnidirectional Antenna	J8444A
	HP 3 dBi Dual-Band Diversity Antenna	J8997A
	HP 7 dBi Dual-Band Directional Antenna	J8999A
	HP Antenna Lightning Arrester	J8996A
Wireless Antenna	HP Dual Band Indoor Short Omnidirectional Antenna	J9401A

Accessory Product Details

Configuration Rules:

Note 1   Localization required. (See Localization Menu)

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

Technical Specifications

HP MSM310 Access Point (US) (J9374B)
HP MSM310 Access Point (WW) (J9379B)
HP MSM310 Access Point (JP) (J9524B)

Ports	2 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
AP characteristics	**Radios**	Single (a/b/g)
	Radio operation modes	Client access, Local mesh, Packet capture
	AP operation modes	Autonomous and controlled
	Wi-Fi Alliance Certification*	a/b/g Wi-Fi Certified
	* 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**	6.4(w) x 6.52(d) x 1.88(h) in. (16.26 x 16.56 x 4.78 cm)
	Weight	1.41 lb. (0.64 kg)
	Enclosure	Indoor, plenum rated
Environment	**Operating temperature**	32°F to 122°F (0°C to 50°C)
	Operating relative humidity	5% to 95%, noncondensing
	Nonoperating/Storage temperature	-40°F to 176°F (-40°C to 80°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
Electrical characteristics	**Description**	IEEE 802.3af PoE compliant or 5 VDC from available AC power supply
	Maximum power rating	6.5 W
	Antenna Connector	(2) RP-SMA with diversity
	Antenna	2) 2 dBi dual-band 2.4/5 GHz omnidirectional antennas
	Number of external antennas	2
Frequency band and Operating channels	**FCC**	2.412 - 2.462 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.745 - 5.825 GHz (149 - 165 channels)
	EN	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels)
	RCR	2.412 - 2.472 GHz (1 - 13 channels) 5.170 - 5.230 GHz (34 - 46 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)	
Safety	UL 2043; IEC 60950-1; EN 60950-1; EN 60601-1-2	
Emissions	EN 55022 Class B; EN 60601-1-2; 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; EN 50385	
Notes	Maximum transmit power varies by country.	

Technical Specifications

Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UN687E)
	3-year, 4-hour onsite, 24x7 coverage for hardware (UN688E)
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN690E)
	3-year, 24x7 SW phone support, software updates (UN689E)
	1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR924E)
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR925E)
	1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR926E)
	4-year, 4-hour onsite, 13x5 coverage for hardware (US021E)
	4-year, 4-hour onsite, 24x7 coverage for hardware (US022E)
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US023E)
	4-year, 24x7 SW phone support, software updates (US024E)
	5-year, 4-hour onsite, 13x5 coverage for hardware (US025E)
	5-year, 4-hour onsite, 24x7 coverage for hardware (US026E)
	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US027E)
	5-year, 24x7 SW phone support, software updates (US028E)
	3 Yr 6 hr Call-to-Repair Onsite (UW419E)
	4 Yr 6 hr Call-to-Repair Onsite (UW420E)
	5 Yr 6 hr Call-to-Repair Onsite (UW421E)
	1-year, 6 hour Call-To-Repair Onsite for hardware (HR928E)
	1-year, 24x7 software phone support, software updates (HR927E)
	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV150E)
	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HV151E)
	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV152E)
	3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HU318E)
	4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU319E)
	4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HU320E)
	5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU321E)
	5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HU322E)
	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.

Radio characteristics: IEEE 802.11a/b/g

	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	-87 dBm	-67 dBm	-94 dBm	-87 dBm	-87 dBm	-70 dB
Transmit power	18 dBm	12 dBm	18.5 dBm	18.5 dBm	18 dBm	13 dBm

Accessories

HP MSM-802.11a/b/g Access Point Series accessories	**Power Supply**	
	HP MSM31x/MSM32x Power Supply	J9405A
	HP 1-Port Power Injector	J9407B
	Mounting Kit	
	HP MSM310/MSM320 Access Point Mounting Bracket	J9403A
	External Antenna	
	HP 5 dBi Indoor/Outdoor Omnidirectional Antenna	J8441A
	HP 8 dBi Outdoor Omnidirectional Antenna	J8444A
	HP 3 dBi Dual-Band Diversity Antenna	J8997A
	HP 7 dBi Dual-Band Directional Antenna	J8999A
	HP Antenna Lightning Arrester	J8996A
	Wireless Antenna	
	HP Dual Band Indoor Short Omnidirectional Antenna	J9401A

Accessory Product Details

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

HP MSM31x/MSM32x Power Supply (J9405A)	**Physical characteristics**	**Dimensions**	3.35(d) x 1.97(w) x 1.27(h) in. (8.5 x 5 x 3.22 cm)
		Weight	0.88 lb. (0.4 kg)
	Environment	**Operating temperature**	32°F to 104°F (0°C to 40°C)
		Operating relative humidity	5% to 95%, noncondensing
		Nonoperating/Storage temperature	-4°F to 176°F (-20°C to 80°C)
		Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Electrical characteristics	**Voltage**	100-240 VAC
		Current	0.5/0.3 A
		Frequency	50/60 Hz
		Notes	Output voltage: 5 VDC
	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 1-port Power Injector (J9407B)	**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)
	Electrical characteristics	**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
	Notes		The 1-port power converter has 1 AC power cord input, 1 RJ-45 10/100/1000 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.

Accessory Product Details

	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 5 dBi Indoor/Outdoor Omnidirectional Antenna (J8441A)	**Electrical characteristics**	**Frequency range 1**	2400 - 2500
		Gain 1 dBi (with antenna cable)	4.4
		VSWR max	1.7:1
		E-Plane (3 dB beamwidth)	31 degrees
		H-Plane (3 dB beamwidth)	Omnidirectional
		Polarization	Linear (vertical)
		Impedance (Ohms)	50
		RF connector	Reverse SMA (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	**Dimensions**	11.5(h) in. (29.21 cm)
		Wind surface area	0.08 sq. ft. (0.01 sq. m)
		Wind survival	125.1 mph (201.13 km/hr)
		Weight	0.30 lb. (0.14 kg)
		Mounting style	Ceiling T-bar, I-beam, or mast
		Enclosure	Polycarbonate
	Environment	**Operating temperature**	-22ºF to 131ºF (-30ºC to 55ºC)
		Nonoperating/Storage temperature	-40ºF to 149ºF (-40ºC to 65ºC)
	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 8 dBi Outdoor Omnidirectional Antenna (J8444A)	**Electrical characteristics**	**Frequency range 1**	2400 - 2500
		Gain 1 dBi (with antenna cable)	8
		VSWR max	1.5:1
		E-Plane (3 dB beamwidth)	13 degrees
		H-Plane (3 dB beamwidth)	Omnidirectional
		Polarization	Linear (vertical)
		Impedance (Ohms)	50
		RF connector	N (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	**Dimensions**	25.25(h) in. (64.14 cm)
		Wind surface area	0.11 sq. ft. (0.01 sq. m)
		Wind survival	125 mph (201.13 km/hr)

Accessory Product Details

	Weight	0.5 lb. (0.23 kg)
	Mounting style	Mast
	Enclosure	Polycarbonate
Environment	**Operating temperature**	-22ºF to 131ºF (-30ºC to 55ºC)
	Nonoperating/Storage temperature	-40ºF to 149ºF (-40ºC to 65ºC)
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 3 dBi Dual-Band Diversity Antenna (J8997A)	**Electrical characteristics**	**Frequency range 1**	2400 - 2500
		Gain 1 dBi (with antenna cable)	3
		Frequency range 2	4900 - 5990
		Gain 2 dBi (with antenna cable)	4
		VSWR max	2.0:1
		E-Plane (3 dB beamwidth)	60 degrees
		E-plane radiation plots	2.45 GHz, E Plane
		H-Plane (3 dB beamwidth)	Omnidirectional
		H-plane radiation plots	2.45 GHz, H Plane
		Impedance (Ohms)	50
		Grounding	DC
		RF connector	Reverse SMA (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	**Dimensions**	6.16(d) x 3.66(w) x 0.89(h) in. (15.65 x 9.3 x 2.26 cm)
		Weight	0.5 lb. (0.23 kg)
		Mounting style	Ceiling grid
		Enclosure	PVC/Acrylic
	Environment	**Operating temperature**	-22ºF to 131ºF (-30ºC to 55ºC)
		Nonoperating/Storage temperature	-40ºF to 149ºF (-40ºC to 65ºC)
	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.

Accessory Product Details

HP 7 dBi Dual-Band Directional Antenna (J8999A)	**Electrical characteristics**	**Frequency range 1**	2400 - 2500
		Gain 1 dBi (with antenna cable)	6.9
		Frequency range 2	4900 - 5990
		Gain 2 dBi (with antenna cable)	7.7
		VSWR max	2.0:1
		E-Plane (3 dB beamwidth)	66 degrees
		E-plane radiation plots	E Plane 2.45 GHz
		H-Plane (3 dB beamwidth)	68 degrees
		H-plane radiation plots	H Plane 2.45 GHz
		Polarization	Linear (vertical)
		Impedance (Ohms)	50
		RF connector	Reverse SMA (male)
		Cable length	2.75 ft. (0.84 m)
	Physical characteristics	**Dimensions**	5.16(d) x 5.16(w) x 1.37(h) in. (13.11 x 13.11 x 3.48 cm)
		Wind surface area	0.12 sq. ft. (0.01 sq. m)
		Wind survival	120 mph (193.08 km/hr)
		Weight	0.5 lb. (0.23 kg)
		Mounting style	Flush wall mount, articulating wall, or mast
		Enclosure	PVC/Acrylic
		Front-to-back ratio (dB)	10
	Environment	**Operating temperature**	-22ºF to 131ºF (-30ºC to 55ºC)
		Nonoperating/Storage temperature	-40ºF to 149ºF (-40ºC to 65ºC)
	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 Antenna Lightning Arrester (J8996A)	**Electrical characteristics**	**VSWR max**	1.4:1
	Physical characteristics	**Dimensions**	2.4(d) x 0.9(w) x 1.2(h) in. (6.1 x 2.29 x 3.05 cm)
	Notes		Input RF power, 100 MHz/6000 MHz: 250 W/10 W 50 Meg Ohm insulation resistance Maximum insertion loss of 0.4 dB
	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.

Accessory Product Details

HP Dual Band Indoor Short Omnidirectional Antenna (J9401A)	**Physical characteristics**	**Dimensions**	3.78(h) in. (9.59 cm)
		Base diameter	0.37 in. (0.93 cm)
	Notes	2.1 dBi (2.45 GHz), 2.4 dBi (4.9 GHz), 2.6 dBi (5.25 GHz), 3.4 dBi (5.875 GHz) Polarization: vertical, omnidirectional VSWR 2:1 max. across all bands	
	Electrical characteristics	Connector	RP-SMA
	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.	

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