

### Overview

### Models

HP MSM313 Access Point (US)	J9346B
HP MSM313 Access Point (WW)	J9350B
HP MSM313 Access Point (JP)	J9525B

### Key features

- Hotspot in a box
- Zero-configuration service interface
- Advanced bandwidth management capabilities
- Complete IP routing and networking services
- Integrated IEEE 802.11a/b/g MSM Access Point

### Product overview

HP MSM313 and MSM323 Access Points integrate a full-featured MultiService Mobility Access Point and MultiService Mobility Controller in a single turnkey unit. They are used to create easy-to-use public/guest Internet access (hotspot) services. The zero-configuration service interface adapts to client device configuration settings. Bandwidth management creates multiple service tiers and provides users with fair access to bandwidth. The access points provide secure user authentication, authorization, and accounting (AAA), enabling a wide range of free or fee-based service models. They support HTML and IEEE 802.1X login, and provide interfaces for centralized AAA, captive portal, and billing functions, allowing large multilocation networks.

### 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, DiffServ, VTP/TCP, and Post
  - Wi-Fi MultiMedia (WMM), IEEE 802.11e EDCF, and Service-Aware priority assigned by VSC
  - Maximum VoIP call capacity: 12 active calls on IEEE 802.11a/b/g
- **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 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
  - Configurable background rogue scanning
  - Automatically adjusts transmit power to reduce interference



### Overview

#### 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

- **All-in-one simplicity:** The HP MSM313 and MSM323 Access Points combine a full-featured access point and Guest Access control feature in a single easy-to-deploy enclosure that is ideally suited for public hotspot networks and small enterprise deployments.
- **Award-winning public/guest Internet access service:** The MSM313 and MSM323 Access Points provide high-speed guest Internet access for up to 25 patrons, guests, and partners. Guest access can be segmented from corporate applications. Easy, Web-based login via a captive, customized portal and zero-configuration service adapts to any client device's IP address and Web proxy settings.
- **Rock-solid security:** Security policies based on user credentials (IEEE 802.1X/EAP), hardware identifiers (MAC address and WEP key), or HTML login are enforced at the network edge to safeguard network integrity. A Standards-based RADIUS interface provides remote authentication, authorization, and accounting (AAA) system integration and hardware-assisted encryption using WPA2/AES (IEEE 802.11i), WPA/RC4, and/or WEP. There is a built-in firewall for secure connection to the Internet.
- **High-performance, multiservice networking:** The MSM313 and MSM323 Access Points can deliver multiple services simultaneously: networking policies tailored for Quality of Service (QoS), authentication, encryption, bandwidth allocation, and VLANs based on user, device, or application identity. End-to-end QoS based on TOS/DiffServ, IEEE 802.1p, and TCP/UDP port. IEEE 802.11e Wireless MultiMedia (WMM) and SpectraLink Voice Priority (SVP) provide voice performance.
- **Rich management features:** Activity statistics support per-user billing by data volume and elapsed session time. There is also integrated support for leading third-party hotspot billing services. The self-healing configuration automatically adjusts to changes in the RF environment. The series provides advanced IP networking capabilities, including Adaptive NAT, SMTP redirect, and DHCP services for transparent application support.
- **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 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
- **Location flexibility:** The series features a plenum-rated enclosure and is powered by IEEE 802.3af Power over Ethernet (PoE) or a power supply accessory (sold separately).

#### Security

- **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



### Overview

- **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

### Warranty and support

- **Lifetime Warranty:** for as long as you own the product, with next-business-day advance replacement (available in most countries).
- **Electronic and telephone support:** limited electronic and telephone support is available from HP. Refer to the HP Web site at: [www.hp.com/networking/support](http://www.hp.com/networking/support) for details on the support provided and the period during which support is available.
- **Software releases:** refer to the HP Web site at: [www.hp.com/networking/support](http://www.hp.com/networking/support) for details on the software releases provided and the period during which software releases are available.



### Technical Specifications

HP MSM313 Access Point (US) (J9346B)  
 HP MSM313 Access Point (WW) (J9350B)  
 HP MSM313 Access Point (JP) (J9525B)

**Ports** 2 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: half or full  
 1 RJ-11 serial console port

**AP characteristics**

<b>Radios</b>	Single (a/b/g)
<b>Radio operation modes</b>	Client access
<b>AP operation modes</b>	Autonomous
<b>Wi-Fi Alliance Certification*</b>	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 performed by the Wi-Fi Alliance Organization. See the Specifications section of this series for more information.

**Physical characteristics**

<b>Dimensions</b>	6.52(d) x 6.4(w) x 1.88(h) in. (16.57 x 16.26 x 4.78 cm)
<b>Weight</b>	3.0 lb. (1.36 kg)
<b>Enclosure</b>	Indoor, plenum rated

**Environment**

<b>Operating temperature</b>	32°F to 122°F (0°C to 50°C)
<b>Operating relative humidity</b>	5% to 95%, noncondensing
<b>Nonoperating/Storage temperature</b>	-40°F to 176°F (-40°C to 80°C)
<b>Nonoperating/Storage relative humidity</b>	5% to 95%, noncondensing

**Electrical characteristics**

<b>Description</b>	5 VDC connector (power supply sold separately), IEEE 802.3af PoE compliant
<b>Maximum power rating</b>	6.5 W
<b>Antenna connector</b>	(2) RP-SMA with diversity
<b>Antenna</b>	(2) 2dBi dual-band 2.4/5 GHz omnidirectional
<b>Number of external antennas</b>	2

**Frequency band and operating channels**

<b>FCC</b>	2.412 - 2.462 GHz (1 - 11 channels) 5.180 - 5.240 GHz (36 - 48 channels) 5.745 - 5.825 GHz (149 - 165 channels)
<b>EN</b>	2.412 - 2.472 GHz (1 - 13 channels) 5.180 - 5.240 GHz (36 - 48 channels)
<b>RCR</b>	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 1950; UL 2043; IEC 60950; EN 60950; CSA 22.2 No. 950-95

**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

**Medical** EN60601-1-2



### Technical Specifications

RF Exposure	FCC Part 15.247; RSS-210; EN 300-328; ETS 301-398
Features	Supported <ul style="list-style-type: none"><li>● 25 simultaneous Guest Access users</li></ul>
	Included Services <ul style="list-style-type: none"><li>● WLAN Management</li><li>● Guest Access</li><li>● Captive Portal</li><li>● PCI - DSS compliant for wireless PoS traffic</li></ul>
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
Notes	Maximum transmit power varies by country.
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UN675E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN676E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UN678E) 3-year, 24x7 SW phone support, software updates (UN677E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR934E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR935E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR996E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR997E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR998E) 4-year, 24x7 SW phone support, software updates (UR999E) 5-year, 4-hour onsite, 13x5 coverage for hardware (US001E) 5-year, 4-hour onsite, 24x7 coverage for hardware (US002E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US003E) 5-year, 24x7 SW phone support, software updates (US004E) 3 Yr 6 hr Call-to-Repair Onsite (UW410E) 4 Yr 6 hr Call-to-Repair Onsite (UW411E) 5 Yr 6 hr Call-to-Repair Onsite (UW412E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR938E) 1-year, 24x7 software phone support, software updates (HR937E) 1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR936E) 1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV134E) 1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HV135E) 3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV136E) 3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HV137E) 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV138E) 4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HV139E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HV140E) 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HV141E)

Refer to the HP website at: [www.hp.com/networking/services](http://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.



### Technical Specifications

#### Radio characteristics:

	IEEE802.11a		IEEE802.11g		IEEE802.11b	
Data rate	6 Mbps	54 Mbps	6 Mbps	54 Mbps	1 Mbps	11 Mbps
Receiver sensitivity	-87 dBm	-67 dBm	-87 dBm	-70 dBm	-94 dBm	-87 dBm
Transmit power	18 dBm	12 dBm	18 dBm	13 dBm	18.5 dBm	18.5 dBm



### Accessories

#### HP Mobility Integrated Services Access Point series accessories

##### Mounting Kit

HP MSM310/MSM320 Access Point Mounting Bracket

J9403A

##### External Antenna

HP 5 dBi Indoor/Outdoor Omnidir 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

##### Power cords

HP MSM31x/MSM32x Power Supply

J9405B



### Accessory Product Details

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

<b>HP 5 dBi Indoor/Outdoor Omnidir Antenna (J8441A)</b>	<b>Electrical characteristics</b>	<b>Frequency range 1</b>	2400 - 2500
		<b>Gain 1 dBi (with antenna cable)</b>	4.4
		<b>VSWR max</b>	1.7:1
	<b>Physical characteristics</b>	<b>E-Plane (3 dB beamwidth)</b>	31 degrees
		<b>H-Plane (3 dB beamwidth)</b>	Omnidirectional
		<b>Polarization</b>	Linear (vertical)
		<b>Impedance (Ohms)</b>	50
		<b>RF connector</b>	Reverse SMA (male)
	<b>Environment</b>	<b>Cable length</b>	2.75 ft. (0.84 m)
		<b>Dimensions</b>	11.5(h) in. (29.21 cm)
		<b>Wind surface area</b>	0.08 sq. ft. (0.01 sq. m)
		<b>Wind survival</b>	125.1 mph (201.13 km/hr)
	<b>Services</b>	<b>Weight</b>	0.30 lb. (0.14 kg)
<b>Mounting style</b>		Ceiling T-bar, I-beam, or mast	
<b>Enclosure</b>		Polycarbonate	
	<b>Operating temperature</b>	-22°F to 131°F (-30°C to 55°C)	
	<b>Nonoperating/Storage temperature</b>	-40°F to 149°F (-40°C to 65°C)	
	Refer to the HP website at: <a href="http://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.		

<b>HP 8 dBi @ Outdoor Omnidirectional Antenna (J8444A)</b>	<b>Electrical characteristics</b>	<b>Frequency range 1</b>	2400 - 2500
		<b>Gain 1 dBi (with antenna cable)</b>	8
		<b>VSWR max</b>	1.5:1
	<b>Physical characteristics</b>	<b>E-Plane (3 dB beamwidth)</b>	13 degrees
		<b>H-Plane (3 dB beamwidth)</b>	Omnidirectional
		<b>Polarization</b>	Linear (vertical)
		<b>Impedance (Ohms)</b>	50
		<b>RF connector</b>	N (male)
	<b>Environment</b>	<b>Cable length</b>	2.75 ft. (0.84 m)
		<b>Dimensions</b>	25.25(h) in. (64.14 cm)
		<b>Wind surface area</b>	0.11 sq. ft. (0.01 sq. m)
		<b>Wind survival</b>	125 mph (201.13 km/hr)
		<b>Weight</b>	0.5 lb. (0.23 kg)
	<b>Mounting style</b>	Mast	



### Accessory Product Details

Environment	Enclosure	Polycarbonate
	Operating temperature	-22°F to 131°F (-30°C to 55°C)
	Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)
Services	Refer to the HP website at: <a href="http://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.	

### 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
Weight		0.5 lb. (0.23 kg)
Mounting style		Ceiling grid
Environment	Enclosure	PVC/Acrylic
	Operating temperature	-22°F to 131°F (-30°C to 55°C)
	Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)
Services	Refer to the HP website at: <a href="http://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.	



### 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
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		
Environment	Enclosure	PVC/Acrylic	
	Front-to-back ratio (dB)	10	
	Operating temperature	-22°F to 131°F (-30°C to 55°C)	
Services	Nonoperating/Storage temperature	-40°F to 149°F (-40°C to 65°C)	
		Refer to the HP website at: <a href="http://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.	



### Accessory Product Details

HP MSM31x/MSM32x Power Supply (J9405B)	Physical characteristics	Dimensions	3.7(d) x 1.5(w) x 1.18(h) in. (9.4 x 3.8 x 3 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: <a href="http://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.	

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