Overview

Models

HP MSM313 Access Point (US)
HP MSM313 Access Point (WW)
HP MSM313 Access Point (JP)

J9346B
J9346B
J9350B

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:
 - O L2/L3/L4 classification: IEEE 802.1p VLAN priority, SpectraLink SVP, DiffServ, VTP/TCP, and Post
 - O Wi-Fi MultiMedia (WMM), IEEE 802.11e EDCF, and Service-Aware priority assigned by VSC
 - O Maximum VoIP call capacity: 12 active calls on IEEE 802.11a/b/g
- Network management:
 - O Fully manageable using HP PCM 3.0 AU1 and HP Mobility Manager 3.0 AU2
 - O SNMP v2c, SNMP v3, MIB-II with Traps, and RADIUS Authentication Client MIB (RFC 2618)
 - O Embedded HTML management tool with secure access (SSL and VPN)
 - O Scheduled configuration and firmware upgrades from central server
- 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
- RF management:
 - O Automatically selects channel on power-up and continuously improves channel selection based on background interference scan
 - O Configurable background rogue scanning
 - O 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):
 - O Up to 16 SSIDs, each with unique MAC address, configurable SSID broadcasts
 - O Individual security and QoS profiles per VSC
 - O Configurable DTIM and minimum data rate per VSC
 - O Each VSC mapped to separate IEEE 802.1Q VLANs
 - O WMM and/or WMM-PS
 - O Security filter
 - O IP filter
- 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 RADIUS Client (RFC 2865 and 2866) with location-aware support
 - O 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 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 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)

2 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: **Ports**

half or full

1 RJ-11 serial console port

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

> Radio operation modes Client access AP operation modes **Autonomous**

Wi-Fi Alliance a/b/g 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** 6.52(d) x 6.4(w) x 1.88(h) in. (16.57 x 16.26 x 4.78 cm)

> Weight 3.0 lb. (1.36 kg) Enclosure Indoor, plenum rated

32°F to 122°F (0°C to 50°C) Environment Operating temperature

> Operating relative 5% to 95%, noncondensing

humidity

Nonoperating/Storage -40°F to 176°F (-40°C to 80°C)

temperature

Nonoperating/Storage

relative humidity

5% to 95%, noncondensing

Electrical characteristics 5 VDC connector (power supply sold separately), IEEE 802.3af PoE Description

compliant

6.5 W Maximum power rating

Antenna connector (2) RP-SMA with diversity

(2) 2dBi dual-band 2.4/5 GHz omnidirectional Antenna

Number of external 2

antennas

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) 2.412 - 2.472 GHz (1 - 13 channels)

ΕN 5.180 - 5.240 GHz (36 - 48 channels)

2.412 - 2.472 GHz (1 - 13 channels)

5.170 - 5.230 GHz (34 - 46 channels)

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

RCR

Medical EN60601-1-2



Radio

Technical Specifications

Emissions

Services

RF Exposure FCC Part 15.247; RSS-210; EN 300-328; ETS 301-398

Features Supported

• 25 simultaneous Guest Access users

Included Services

- WLAN Management
- Guest Access
- Captive Portal
- PCI DSS compliant for wireless PoS traffic

Class B

Notes Maximum transmit power varies by country.

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)

EN 55022 Class B; EN 60601-1-2; EN 301 489-1; EN 301 489-17; ICES-003 Class B; FCC Part 15,

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

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 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 IEEE802.11		02.11g	g 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.

HP 5 dBi Indoor/Outdoor Electrical characteristics Frequency range 1	2400 - 2500
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Omnidir

Gain 1 dBi (with antenna 4.4 Antenna (J8441A)

cable)

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

-22°F to 131°F (-30°C to 55°C) Environment Operating temperature

> -40°F to 149°F (-40°C to 65°C) Nonoperating/Storage

temperature

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 Electrical characteristics **Omnidirectional**

Frequency range 1 2400 - 2500

> Gain 1 dBi (with antenna 8

cable)

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)

Weight 0.5 lb. (0.23 kg)

Mounting style Mast



Antenna (J8444A)

Accessory Product Details

Enclosure Polycarbonate

Environment Operating temperature -22°F to 131°F (-30°C to 55°C)

Nonoperating/Storage -40°F to 149°F (-40°C to 65°C)

temperature

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 3

cable)

Frequency range 2 4900 - 5990

Gain 2 dBi (with antenna 4

cable)

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 $6.16(d) \times 3.66(w) \times 0.89(h)$ in. $(15.65 \times 9.3 \times 10^{-3}) \times 10^{-3} \times 10^{-3}$

2.26 cm)

Weight 0.5 lb. (0.23 kg)

Mounting style Ceiling grid

Enclosure PVC/Acrylic

Environment Operating temperature -22°F to 131°F (-30°C to 55°C)

Nonoperating/Storage -40°F to 149°F (-40°C to 65°C)

temperature

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 6.9

cable)

4900 - 5990 Frequency range 2

Gain 2 dBi (with antenna 7.7

cable)

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 -22°F to 131°F (-30°C to 55°C) Operating temperature

> Nonoperating/Storage -40°F to 149°F (-40°C to 65°C)

temperature

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 MSM31x/MSM32x Physical characteristics **Dimensions** $3.7(d) \times 1.5(w) \times 1.18(h)$ in. $(9.4 \times 3.8 \times 3 \text{ cm})$ Power Supply (J9405B)

Weight 0.88 lb. (0.4 kg)

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

Operating relative 5% to 95%, noncondensing humidity

Nonoperating/Storage -4°F to 176°F (-20°C to 80°C)

temperature

Nonoperating/Storage 5% to 95%, noncondensing relative humidity

Electrical characteristics Voltage 100-240 VAC

> Current 0.5/0.3 A 50/60 Hz Frequency

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.

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