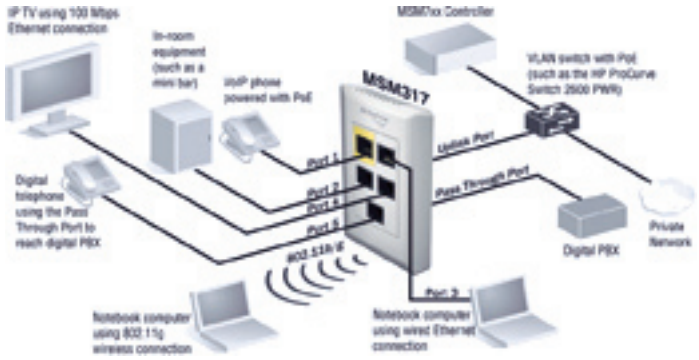

HP E-MSM317 Access Device Series

Data sheet

Product overview

HP E-MSM317 Access Device integrates wired and wireless connectivity into a small unit that can be quickly and discretely installed in a standard wall outlet box. It provides four Ethernet ports, a 2.4 GHz wireless access point, and a pass-through RJ-45 connection to support a range of service and user connectivity options. One of the front panel Ethernet ports can be configured as an IEEE 802.3af-compliant PSE port to enable devices such as IP telephones to be powered directly from the unit. The HP E-MSM317 Access Device requires a single Power over Ethernet (PoE) cable drop, reducing cabling, switch ports, and power sourcing equipment. The product is designed to provide wireless coverage for a 440 square foot (40 square meter) room. Actual coverage area, and signal levels within the coverage area, will be effected by mounting location, building construction and obstacles.

Key features

- Single radio
- IEEE 802.11b/g
- Self-healing, self-optimizing local mesh
- Two internal antennas
- 4 10/100 managed Ethernet ports

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 VSC
  - Maximum VoIP call capacity: 12 active calls on IEEE 802.11a/b/g/n
- **Network management:**
  - Fully manageable using HP Manager and HP Mobility Manager
  - 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

Connectivity

- **Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100 ports
- **IEEE 802.3af Power over Ethernet 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. Unit can be powered by 802.3af or PoE+ source
- **Power Forwarding:** PoE Class 2 (6.49W) when powered by 802.3af

Mobility

- **Anywhere, anytime wireless coverage:**
  - Single radio IEEE 802.11b/g access points with integrated antenna
  - Per-radio software-selectable configuration of frequency bands
  - Self-healing, self-optimizing local mesh extends network availability
- **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 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
- **Captive portal functions:**
  - Splash page advertisement support
  - New user versus already registered
  - Ad page advertisement support
  - Static advertizing support
  - Frame insertion support
  - Static advertizing support

- **Auto Channel Select (ACS):** helps reduce radio co-channel interference by automatically selecting an unoccupied radio channel

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
- **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

- **Warranty:** lifetime warranty with the exception of the hard disk which has a 5-year 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

Specifications

	HP E-MSM317 Access Device US (J9422A)	HP E-MSM317 Access Device WW (J9423A)
Ports	4 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: half or full 1 RJ-45 pass through port	4 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Duplex: half or full 1 RJ-45 pass through port
AP characteristics		
Radios	Single (b/g)	Single (b/g)
Radio operation modes	Client access, Packet capture	Client access, Packet capture
AP operation modes	Controlled	Controlled
Wi-Fi Alliance Certification	b/g Wi-Fi Certified	b/g Wi-Fi Certified
Physical characteristics		
Dimensions	2.15(d) x 2.75(w) x 4.54(h) in. (5.46 x 6.99 x 11.53 cm)	2.15(d) x 3.39(w) x 3.39(h) in. (5.46 x 8.61 x 8.61 cm)
Weight	0.37 lb. (0.17 kg)	0.37 lb. (0.17 kg)
Enclosure	Indoor	Indoor
Mounting	Designed for mounting in a standard wall outlet box: NEMA WD6-2002 (US), BS 4662:2006 (WW). Minimum depth in wall box is 1.4" (3.5cm). The dimensions in the datasheet describe the front faceplate.	Designed for mounting in a standard wall outlet box: NEMA WD6-2002 (US), BS 4662:2006 (WW). Minimum depth in wall box is 1.4" (3.5cm). The dimensions in the datasheet describe the front faceplate.
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	5% to 90%, noncondensing	5% to 90%, noncondensing
Nonoperating/Storage temperature	-4°F to 176°F (-20°C to 80°C)	-4°F to 176°F (-20°C to 80°C)
Nonoperating/Storage relative humidity	5% to 90%, noncondensing	5% to 90%, noncondensing
Electrical characteristics		
Description	Powered Device (PD): The device will be powered by any IEEE 802.3af-compliant, prestandard IEEE 802.3at and select non-standard sources. Power Consumption is 6W (with no device attached to designated PoE port)	Powered Device (PD): The device will be powered by any IEEE 802.3af-compliant, prestandard IEEE 802.3at and select non-standard sources. Power Consumption is 6W (with no device attached to designated PoE port)
Antenna	Internal omnidirectional antenna chips	Internal omnidirectional antenna chips
Number of internal antennas	2	2
Notes	The MSM317 Access Device can supply PoE power on port 1. Two PoE power settings are available as follows: • When set to 802.11af Class 1 to 2, port 1 supports an 802.3af Class 1 or Class 2 device drawing a maximum of 6.49 watts. • When set to 802.11af Class 0 to 3, port 1 supports 802.3af Class 0, 1, 2, and 3 devices. For the MSM317 to provide 802.11af Class 0 and 3 support, it must be powered by a PoE power source that is capable of supplying at least 23 watts. For example, the new HP ProCurve 2910al-POE+ switch provides up to 30 watts per port.	The MSM317 Access Device can supply PoE power on port 1. Two PoE power settings are available as follows: • When set to 802.11af Class 1 to 2, port 1 supports an 802.3af Class 1 or Class 2 device drawing a maximum of 6.49 watts. • When set to 802.11af Class 0 to 3, port 1 supports 802.3af Class 0, 1, 2, and 3 devices. For the MSM317 to provide 802.11af Class 0 and 3 support, it must be powered by a PoE power source that is capable of supplying at least 23 watts. For example, the new HP ProCurve 2910al-POE+ switch provides up to 30 watts per port.
Frequency band and Operating channels		
FCC	2.412 - 2.462 GHz (1 - 11 channels)	2.412 - 2.462 GHz (1 - 11 channels)
EN	2.412 - 2.472 GHz (1 - 13 channels)	2.412 - 2.472 GHz (1 - 13 channels)
Radio	FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; EN 301-489-1; EN 301-489-17; RSS-Gen (Canada); OFTA (Hong Kong); DSPR (Japan); IDA Registration (Singapore); MIC approval (Korea)	FCC Part 15.247; FCC Part 15.407 (US); RSS-210 (Canada); EN 300 328; EN 301-489-1; EN 301-489-17; RSS-Gen (Canada); OFTA (Hong Kong); DSPR (Japan); IDA Registration (Singapore); MIC approval (Korea)
Safety	UL 60950-1; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1	UL 60950-1; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1
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	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	FCC Bulletin OET-65C; RSS-102
Notes	The MSM317 is designed to provide wireless coverage in a 422 sq. ft. room. Ports: (switch) 4 10/100BASE-TX ports, RJ-45 jacks on faceplate, 1 10/100BASE-TX port for uplink, RJ-45 jack or 110 punchdown block on rear of unit, and 1 RJ-45 jack on faceplate and rear of unit (pass-through).	The MSM317 is designed to provide wireless coverage in a 422 sq. ft. room. Ports: (switch) 4 10/100BASE-TX ports, RJ-45 jacks on faceplate, 1 10/100BASE-TX port for uplink, RJ-45 jack or 110 punchdown block on rear of unit, and 1 RJ-45 jack on faceplate and rear of unit (pass-through). The HP ProCurve MSM317 Access Device WW J9423A is approved to ship into Japan

Specifications (continued)

	HP E-MSM317 Access Device US (J9422A)	HP E-MSM317 Access Device WW (J9423A)
Services	3-year, parts only, global next-day advance exchange (UQ569E) 3-year, 4-hour onsite, 13x5 coverage for hardware (UQ570E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ568E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ571E) 1-year, post-warranty, parts only, global next-day advance exchange (UQ572PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UQ585PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UQ586PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ587PE) 3 Yr 6 hr Call-to-Repair Onsite (UW319E) 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.	3-year, parts only, global next-day advance exchange (UQ569E) 3-year, 4-hour onsite, 13x5 coverage for hardware (UQ570E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ568E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ571E) 1-year, post-warranty, parts only, global next-day advance exchange (UQ572PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UQ585PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UQ586PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ587PE) 3 Yr 6 hr Call-to-Repair Onsite (UW319E) 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:

IEEE802.11b

Data rate	1 Mbps	2 Mbps	5.5 Mbps	11 Mbps
Receiver sensitivity	-89 dBm	-87 dBm	-85 dBm	-75 dBm
Transmit power	16 dBm	16 dBm	16 dBm	16 dBm

IEEE802.11g

Data rate	6 Mbps	9 Mbps	12 Mbps	18 Mbps	24 Mbps	36 Mbps	48 Mbps	54 Mbps
Receiver sensitivity	-82 dBm	-81 dBm	-79 dBm	-77 dBm	-68 dBm	-68 dBm	-68 dBm	-68 dBm
Transmit power	14.5 dBm	14.5 dBm	14.5 dBm	14.5 dBm	14.5 dBm	14.5 dBm	13 dBm	10 dBm

Standards and protocols
(applies to all products in series)

Mobility
IEEE 802.11b Higher-Speed Physical Layer Extension in the 2.4 GHz Band
IEEE 802.11d Global Harmonization
IEEE 802.11g Further Higher Data Rate Extension in the 2.4 GHz Band
IEEE 802.11i Medium Access Control (MAC) Security Enhancements

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.

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

4AA0-1657ENW, Created September 2010