Overview

### Models

HP E-MSM710 Mobility Controller	J9325A
HP E-MSM760 Mobility Controller	J9420A
HP E-MSM765zl Mobility Controller	J9370A
HP E-MSM710 Access Controller	J9328A
HP E-MSM760 Access Controller	J9421A

## Key features

- Scalability and redundancy for the midmarket
- Enhanced architecture for flexible network design
- IEEE 802.11a/b/g/n AP and access device support
- Comprehensive WLAN security
- Blade mobility controller

### Product overview

Working in unison with HP E-series MultiService Mobility Access Points, HP E-series MultiService Mobility Controllers deliver high-performance networking solutions for the midmarket. The enhanced architecture scales to 802.11n without requiring expensive controller upgrades. Robust identity- and roles-based user account profiles, as well as Virtual Service Communities (VSCs) with independently configurable Quality of Service (QoS), authentication, encryption, and VLAN support, deliver intelligence to the edge of the network. Scalable from small to large midmarket deployments, the E-series wireless controllers deliver a fast-roaming capability. Wireless security is comprehensive with support for internal and external authentication, authorization, and accounting (AAA) servers, built-in stateful firewall, per-user VLAN mapping, and mutual controller/access point (AP) authentication.

## Features and benefits

Quality of Service (QoS)

- Rate limiting: sets per-port ingress enforced maximums and per-port, per-queue guaranteed minimums
- 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

#### **Firewall**

- Stateful firewall: enforces firewall policies to control traffic and filter access to network services; maintains session information for every connection passing through it, enabling the firewall to control packets based on existing sessions
- NAT/PAT: choice of dynamic partial address translation (PAT) or static network address translation (NAT) preserves a network's IP address pool or conceals the private address of network resources, such as web servers, which are made accessible to users of a guest or public wireless LAN
- Authenticated network access: authenticates users with an internal or external RADIUS server before allowing full network connectivity

#### Management

• Complete session logging: provides detailed information for problem identification and resolution



## HP E-series MultiService Controller (MSM)

## **QuickSpecs**

### Overview

- Remote configuration and management: through secure web browser, command-line (console port or SSH), SOAP, or SNMP
- Management interface control: allows interfaces to be enabled or disabled depending on security preferences
- Management VLAN: segments traffic to and from management interfaces, including CLI, web browser interface, and SNMP
- RADIUS accounting support: separates RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- Unified RADIUS Account Management: provides management across wired and wireless networks
- Secure web GUI: provides a secure, easy-to-use graphical interface for module configuration
- Command-line interface (CLI): provides a secure, easy-to-use command-line interface for configuring the module via SSH or a switch console; provides direct real-time session visibility
- HP PCM and PMM: provides central management for discovery, logging, status, and configuration management
- Logging: provides local and remote logging of events via SNMP (v2c and v3) and syslog; provides log throttling and log filtering to reduce the number of log events generated
- Controller networking:
  - O Bridging and routing: IEEE 802.1d-compliant bridging, RIPv1 (RFC 1058), and RIPv2 (RFC 1723)
  - O Stateful firewall
  - O Other: PPPoE Client (RFC 2516), ICMP (RFC 792), and IEEE 802.1q VLAN tagging, NAT (RFC 1631), and CIDR (RFC 1519)
- DHCP options:
  - O DNS Relay and SMTP Redirection
  - O DHCP: Server (RFC 2131), Client, and Option-82 Relay (RFC 3046)
- Band steering: Automatically redirects 5 GHz-capable clients to the 5 GHz spectrum
- Network management:
  - O Centralized management through PCM and PMM
  - O SNMP v2c, MIB-II with Traps, RADIUS Authentication Client MIB (RFC 2618), and RIPv2 MIB Extension (RFC 1724)
  - O Embedded HTML management tool with secure access (SSL and VPN)
  - O Scheduled configuration and firmware upgrades from central server
  - O Per-user activity records by time used or data transferred
  - O Remote syslog
- Unified network visibility: provides visibility between wired and wireless network using LLDP and sFlow

#### Connectivity

• 10 GbE connections to the switch (for E-MSM765zl mobility controller): two 10-GbE wire-speed internal connections help ensure that the network connections from the application to the switch backplane will not limit application performance

#### **Performance**

- High-performance processor system:
  - O E-MSM765zl: Intel® Core™ 2 Duo Processor T7500 with 2.2 GHz, 4 MB cache provides a high-performance compute environment in a small footprint using a single-switch slot
  - O E-MSM760: Intel® Core™ 2 Duo Processor E6400 with 2.13 GHz, 2 MB cache provides a high-performance compute environment in an appliance form factor
- Memory subsystems: 4/2 GB of DDR2 dual-channel memory (E-MSM765zl/E-MSM760) provides for enhanced application performance
- **Disk drive**: 250 GB SATA II 7200 rpm hard disk drive allows rapid data reads/writes, providing improved application performance

#### Mobility

- Solutions enhanced for businesses: HP E-series MSM7xx controllers deliver services for a range of vertical markets, including healthcare, hospitality, education, manufacturing, transportation, and service providers
- Powerful security capabilities: robust, identityand role-based user account profiles use internal or external AAA services



## HP E-series MultiService Controller (MSM)

# **QuickSpecs**

### Overview

- Solutions that cover the most important WLAN applications: HP E-series MSM7xx controllers and the rest of the HP E-series MultiService Mobility Solutions deliver rich application support, including guest access, location-based services, Voice over Wi-Fi (VoWi-Fi), hotspot, surveillance, and secure point of sale
- Capacity that scales from small office to large campus: efficiently deploy wireless LAN (WLAN) capacity with the E-MSM710, which controls up to 10 APs; the E-MSM760, which controls 40 to 200 APs; and the E-MSM765zl, which controls 40 to 200 APs; the E-MSM760 and E-MSM765zl controllers can be configured in a virtual controller (team) model in which up to 800 APs can be managed from a single IP address (a team must consist of all E-MSM760 or all E-MSM765 controllers)
- Virtual controller:
  - O Available only with the E-MSM760 mobility controller and the E-MSM765zl controller
  - O Capable of managing up to 800 MSM APs through a single IP address
  - O Redundant configuration preserves network mobility services through seamless failover
- Mobility Traffic Manager:
  - O Flexible and multiple network distribution schemes address any business need
  - O Policies for user network and security profiles are consistently applied and enforced
  - O Wireless traffic can be directed anywhere in the network as required
  - O Enterprise businesses can easily migrate to the E-series mobility solution, preserving prior network design

#### Controller Client Access Control:

- O SSL-protected universal access method, MAC address authentication, and IEEE 802.1x authentication
- O Web proxy server; support for centralized portal
- O AAA Security
- O WPA and WPA2 encryption
- O Client-fixed IP address spoofing
- O Per-site and per-user access lists; white list and black list support
- O Bandwidth limiting per user or per VLAN
- O Concurrent users (up to 100 for the E-MSM710 controller and up to 2000 for the E-MSM760 and E-MSM765zl controllers)
- Simplified management with central control: HP E-series MSM7xx controllers reduce the time and complexity of managing a wireless network; the solution controls hundreds of APs from a single management interface and helps ensure that a consistent set of services is delivered throughout the wireless network; the controllers push authentication, encryption, QoS enforcement, and access policies to the access points delivering intelligence to the edge of your mobile network
- Services:
  - O Standard Layer 2 roaming and VoWLAN support on all controllers
  - O Advanced Fast roaming on the mobility controllers
  - O Plug-and-play AP management
  - O Public and guest Internet access
- Intra-/Inter-subnet roaming:
  - O OpenVPN protected tunnels for secure communication of control traffic
  - O Authenticated unencrypted UDP tunnels for AP-to-controller, and controller-to-controller data traffic
- Mobility controllers exception for intra-subnet/inter-subnet roaming: intra-subnet and inter-subnet Advanced Fast roaming is not included on any of the HP E-series MSM Access Controllers

#### Security

- Secure Shell (SSHv2): encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- Secure Sockets Layer (SSL): encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- IEEE 802.1X and RADIUS network logins: control wireless network access for authentication and accountability using IEEE 802.1x and RADIUS
- 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
- Web-based authentication: provides a web browser-based environment to authenticate clients that may not support the IEEE 802.1X supplicant



### Overview

- IEEE 802.1x supplicant on MSM APs: helps prevent deployment of rogue networking equipment
- Secure management access: securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3

### Policy management

• Standards-based authentication support for Active Directory and IEEE 802.1X: seamlessly integrates into existing authentication services or uses the built-in database

#### Warranty and support

- Hardware warranty:
  - O Lifetime warranty for the E-MSM765zl controller (J9370A) with the exception of the hard disk drive, which has a 5-year limited warranty
  - O One-year limited hardware warranty for E-MSM710 and E-MSM760 controllers
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)



## Technical Specifications

HP E-MSM710 Mobility Controller (J9325A)

Ports 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

1 RS-232C DB-9 console port

Physical characteristics Dimensions  $7.5(d) \times 10(w) \times 1.74(h)$  in.  $(19.05 \times 25.4 \times 4.42 \text{ cm})$ 

**Weight** 6 lb. (2.72 kg)

Mounting 1U rack mountable with HP E-MSM710 Controller Rack Mounting Kit (J9404A)

Environment Operating temperature 41°F to 104°F (5°C to 40°C)

Operating relative

humidity

20% to 90%, noncondensing

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

temperature

Nonoperating/Storage relative humidity

5% to 95%, noncondensing

**Electrical characteristics** Description IEEE 802.3af PoE compliant, or 48 VDC input from included AC power

supply

Voltage 100-240 VAC
Current 0.2/0.1 A
Maximum power rating 6 W
Frequency 50/60 Hz

Safety UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1 Emissions FCC part 15 Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003

Features Supported

• IEEE 802.11 n/a/b/g access points and/or access devices

• 10 access points and/or access devices

• Unlimited simultaneous users

• 100 simultaneous guest access users

#### Included services

- WLAN management
- Guest access
- Captive portal
- PCI DSS compliant for wireless PoS traffic
- Real-Time Location Services (RTLS)
- Advanced Fast roaming with VoWLAN support
- Mobility Traffic Manager (MTM), with a maximum of 1000 simultaneous MTM clients
- Support for up to 16 VSC profiles
- Unified policy enforcement and network visibility
- No limit on the number of simultaneous non-guest access and/or non-MTM wireless clients
- Virtual controller

Services 3-year, parts only, global next-day advance exchange (UN535E)

3-year, 4-hour onsite, 13x5 coverage for hardware (UN536E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UN537E)

3-year, 4-hour onsite, 24x7 coverage for hardware,



## Technical Specifications

24x7 SW phone support and SW updates (UN538E)

3-Year, 9x5 SW phone support, software updates (UQ581E) 3-year, 24x7 SW phone support, software updates (UQ582E)

1-year, post-warranty, parts only, global next-day advance exchange (UN539PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UN540PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UN541PE)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support

(UN542PE)

3 Yr 6 hr Call-to-Repair Onsite (UW328E)

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 E-MSM760 Mobility Controller (J9420A)

Ports 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

1 RJ-45 serial console port

Physical characteristics Dimensions 15.38(d) x 17.32(w) x 1.75(h) in. (39.07 x 43.99 x 4.45 cm) (1U height)

**Weight** 13.45 lb. (6.1 kg)

Mounting Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (hardware included); horizontal

surface mounting only

Environment Operating temperature 41°F to 104°F (5°C to 40°C)

Operating relative 15% to 80%, noncondensing

humidity

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

temperature

Electrical characteristics Maximum heat dissipation 434 BTU/hr (457.87 kJ/hr)

Voltage 100-240 VAC

Current 2/1 A

Maximum power rating 127 W

Frequency 50/60 Hz

Safety UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1 Emissions FCC part 15 Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003

Features Supported

• IEEE 802.11 n/a/b/g access points and/or access devices

- 40 to 200 (in increments of 40) access points and/or access devices
- Unlimited simultaneous users
- 1000 simultaneous guest access users upgradable in increments of 250 per 40 license pack, up to a maximum of 2000 supported users

### Included services

- WLAN management
- Guest access
- Captive portal



## Technical Specifications

PCI DSS compliant for wireless PoS traffic

• Real-Time Location Services (RTLS)

Advanced Fast roaming with VoWLAN support

Mobility Traffic Manager (MTM), with a maximum of 10,000 simultaneous MTM clients

• Support for up to 64 VSC profiles

• Unified policy enforcement and network visibility

Virtual controller

No limit on the number of simultaneous non-guest access and/or non-MTM wireless clients

Services 3-year, parts only, global next-day advance exchange (UQ652E)

3-year, 4-hour onsite, 13x5 coverage for hardware (UQ653E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ654E)

3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates

(UQ656E)

3-Year, 9x5 SW phone support, software updates (UQ615E) 3-year, 24x7 SW phone support, software updates (UQ616E)

1-year, post-warranty, parts only, global next-day advance exchange (UQ657PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UQ658PE) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UQ659PE)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support

(UQ661PE)

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 E-MSM765zl Mobility Controller (J9370A)

**Physical characteristics Dimensions** 10.3(d) x 8.13(w) x 1.75(h) in. (26.16 x 20.65 x 4.45 cm)

**Weight** 2.05 lb. (0.93 kg)

Mounting Install the blade in any of the following chassis: HP E5406zl (J8697A), HP E5412zl (J8698A), and HP

E8212zl (J8715A)

Environment Operating temperature 32°F to 113°F (0°C to 45°C)

Operating relative

humidity

15% to 95% @ 131°F (55°C), noncondensing

Nonoperating/Storage

temperature

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage

relative humidity

15% to 95%, noncondensing

Electrical characteristics Description IEEE 802.3af PoE compliant or 48 VDC input from included AC power

supply

Maximum heat dissipation 272 BTU/hr (287 kJ/hr)

Voltage 100-240 VAC
Current 1.0/0.4 A
Maximum power rating 80 W
Frequency 50/60 Hz

 Safety
 UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1

 Emissions
 FCC part 15 Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003



## Technical Specifications

#### **Features**

### Supported

- IEEE 802.11 n/a/b/g access points and/or access devices
- 40 to 200 (in increments of 40) access points and/or access devices
- Unlimited simultaneous users
- 1000 simultaneous guest access users upgradable in increments of 250 per 40 license pack, up to a maximum of 2000 supported users

#### Included services

- WLAN management
- Guest access
- Captive portal
- PCI DSS compliant for wireless PoS traffic
- Real-Time Location Services (RTLS)
- Advanced Fast roaming with VoWLAN support
- Mobility Traffic Manager (MTM), with a maximum of 10,000 simultaneous MTM clients
- Support for up to 64 VSC profiles
- Unified policy enforcement and network visibility
- Virtual controller
- No limit on the number of simultaneous non-guest access and/or non-MTM wireless clients

### Notes

A maximum of four E-MSM765zl controllers can be installed in the same chassis, and a maximum of three E-MSM765zl controllers are supported in the E5406zl switch.

Services

3-year, 4-hour onsite, 13x5 coverage for hardware (UQ601E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ602E) 3-year, 4-hour onsite, 24x7 coverage for hardware,

24x7 SW phone support and SW updates (UQ604E) 3-Year, 9x5 SW phone support, software updates (UQ617E) 3-year, 24x7 SW phone support, software updates (UQ618E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UQ605E)

4-year, 4-hour onsite, 24x7 coverage for hardware (UQ606E)

4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UQ608E)

4-year, 24x7 SW phone support, software updates (UQ607E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UQ609E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UQ610E)

5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UQ612E)

5-year, 24x7 SW phone support, software updates (UQ611E)

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 E-MSM710 Access Controller (J9328A)

Ports 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

1 RS-232C DB-9 console port

Physical characteristics Dimensions  $7.52(d) \times 10(w) \times 1.73(h)$  in.  $(19.1 \times 25.4 \times 4.4 \text{ cm})$ 

**Weight** 6 lb. (2.72 kg)

Mounting 1U rack mountable with HP E-MSM710 Controller Rack Mounting Kit (J9404A)



## Technical Specifications

Environment Operating temperature 41°F to 104°F (5°C to 40°C)

Operating relative 20% to 90%, noncondensing

humidity

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

temperature

Nonoperating/Storage 5% to 95%, noncondensing

relative humidity

Electrical characteristics Description IEEE 802.3af PoE compliant, or 48 VDC input from included AC power

supply

Voltage 100-240 VAC
Current 0.2/0.1 A
Maximum power rating 6 W
Frequency 50/60 Hz

UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1

Emissions FCC part 15 Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003

Features Supported

Safety

• IEEE 802.11 n/a/b/g access points or access devices

10 access points and/or access devices

• Unlimited simultaneous users

• 100 simultaneous guest access users

#### Included services

WLAN management

Guest access

Captive portal

PCI DSS compliant for wireless PoS traffic

Real-Time Location Services (RTLS)

• Standard Layer 2 roaming with VoWLAN support

Support for up to 16 VSC profiles

• Unified policy enforcement and network visibility

3-year, parts only, global next-day advance exchange (UN639E)

3-year, 4-hour onsite, 13x5 coverage for hardware (UN640E)

3-year, 4-hour onsite, 24x7 coverage for hardware (UN641E)

3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates

(UN642E)

3-Year, 9x5 SW phone support, software updates (UQ583E)

3-year, 24x7 SW phone support, software updates (UQ584E)

1-year, post-warranty, parts only, global next-day advance exchange (UN643PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UN644PE)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UN645PE)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support

(UN646PE)

3 Yr 6 hr Call-to-Repair Onsite (UW331E)

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.



Services

## Technical Specifications

HP E-MSM760 Access Controller (J9421A)

Ports 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

1 RJ-45 serial console port

Weight 13.45 lb. (6.1 kg)

Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (hardware included); horizontal

surface mounting only

Environment Operating temperature 41°F to 104°F (5°C to 40°C)

Operating relative 15% to 80%, noncondensing

humidity

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

temperature

**Electrical characteristics** Maximum heat dissipation 434 BTU/hr (457.87 kJ/hr)

Voltage 100-240 VAC

 Current
 2/1 A

 Frequency
 50 / 60 Hz

Safety UL 60950-1; CAN/CSA 22.2 No. 60950-1; IEC 60950-1; EN 60950-1 Emissions FCC part 15 Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003

Features Supported

• IEEE 802.11 n/a/b/g access points and/or access devices

• 40 to 200 (in increments of 40) access points and/or access devices

• Unlimited simultaneous users

• 1000 simultaneous guest access users upgradable in increments of 250 per 40 license pack, up to a maximum of 2000 supported users

#### Included services

- WLAN management
- Guest access
- Captive portal
- PCI DSS compliant for wireless PoS traffic
- Real-Time Location Services (RTLS)
- Standard Layer 2/Layer 3 roaming with VoWLAN support
- Support for up to 16 VSC profiles
- Unified policy enforcement and network visibility

Services 3-year, parts only, global next-day advance exchange (UQ652E)

3-year, 4-hour onsite, 13x5 coverage for hardware (UQ653E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UQ654E)

3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates

(UQ655E)

3-Year, 9x5 SW phone support, software updates (UQ613E) 3-year, 24x7 SW phone support, software updates (UQ614E)

1-year, post-warranty, parts only, global next-day advance exchange (UQ657PE) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UQ658PE)



## **Technical Specifications**

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UQ659PE)

1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UQ660PE)

3 Yr 6 hr Call-to-Repair Onsite (UW317E)

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.



### Accessories

HP E-series MultiService WLAN Controller (MSM) HP E-MSM430 Dual Radio 802.11n AP (AM) J9650A accessories HP E-MSM430 Dual Radio 802.11n AP (WW) J9651A HP E-MSM430 Dual Radio 802.11n AP (JP) J9652A HP E-MSM430 Dual Radio 802.11n AP (IL) J9653A HP E-MSM460 Dual Radio 802.11n AP (AM) J9590A HP E-MSM460 Dual Radio 802.11n AP (IL) J9618A HP E-MSM460 Dual Radio 802.11n AP (WW) J9591A HP E-MSM460 Dual Radio 802.11n AP (JP) J9589A HP E-MSM466 Dual Radio 802.11n AP (AM) J9621A HP E-MSM466 Dual Radio 802.11n AP (JP) J9620A HP E-MSM466 Dual Radio 802.11n AP (WW) J9622A HP E-MSM410 Access Point JP J9529B HP E-MSM410 Access Point US J9426B HP E-MSM410 Access Point WW J9427B HP E-MSM410 Single Radio 802.11n Access Point (IL) J9616A HP E-MSM422 Access Point JP J9530B HP E-MSM422 Access Point US J9358B HP E-MSM422 Access Point WW J9359B HP E-MSM422 Dual Radio 802.11n AP (IL) J9617A HP E-MSM317 Access Device US J9422A HP E-MSM317 Access Device WW J9423A HP E-MSM310 Access Point US J9374B HP E-MSM310 Access Point WW J9379B HP E-MSM310 Access Point JP J9524B HP E-MSM320 Access Point US J9360B HP E-MSM320 Access Point WW J9364B HP E-MSM320 Access Point JP J9527B HP E-MSM325 Access Point US J9369B HP E-MSM325 Access Point WW J9373B HP E-MSM335 Access Point US J9356B HP E-MSM335 Access Point WW J9357B HP E-MSM310-R Access Point US J9380B HP E-MSM310-R Access Point WW J9383B HP E-MSM320-R Access Point US J9365B HP E-MSM320-R Access Point WW J9368B HP E-MSM320-R Access Point JP J9528B HP E-MSM710 Mobility Controller (J9325A) HP 1-Port Power Injector J9407A HP E-MSM710 Controller Rack Mounting Kit J9404A HP E-MSM710 Mobility Services upgrade J9331A



HP E-MSM760 Mobility Controller (J9420A) HP E-MSM760/765 40-Access Point License

HP E-MSM765zl Mobility Controller (J9370A) HP E-MSM760/765 40-Access Point License J9371A

J9371A

### Accessories

HP E-MSM710 Access Controller (J9328A)	
HP 1-Port Power Injector	J9407A
HP E-MSM710 Controller Rack Mounting Kit	J9404A
HP E-MSM710 Mobility Services upgrade	J9331A
HP E-MSM760 Access Controller (J9421A)	
HP E-MSM760 Premium License	J9491A
HP E-MSM760/765 40-Access Point License	J9371A

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



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