Models
HP RF Manager Controller with 50-sensor License J9521A
HP RF Manager for VMware 50 Sensor E-LTU 9838AAE
HP MSM415 RF Security Sensor J9522A

Key features
- Automatic intrusion threat detection and prevention
- Central management of security policies
- Complete reporting and predefined compliance reports
- Roles-based administrative rights
- Appliance and VMware-ready form factors

Product overview
The HP Mobility Security IDS/IPS System is comprised of HP RF Manager and MSM415 Sensors. HP RF Manager in combination with the MSM415 Sensor detects and prevents wireless threats with automated policy-based security and location-tracking capabilities with full support for all IEEE 802.11 WLAN networks.

The system eliminates false positive alerts and uses patented automatic classification and mitigation techniques to block unauthorized wireless traffic without disrupting the performance of authorized wireless devices. The HP MSM415 RF Security Sensor is required to continuously scan IEEE 802.11a/b/g/n networks for wireless threats and enforce their mitigation.

The HP Mobility Security IDS/IPS System prevents multiple threats while scanning for new ones, providing industry-leading wireless protection, and it can be deployed to enforce a no-WiFi policy. It has predefined compliance reports for the Health Insurance Portability and Accountability Act (HIPAA), PCI, the Sarbanes-Oxley Act, the Gramm-Leach-Bliley Act, and Department of Defense (DoD) Directive 1800.2.

Features and benefits
Intrusion detection/prevention system (IDS/IPS)

- **Industry-leading threat detection**
  protects your organization from emerging threats, including comprehensive IEEE 802.11n rogue APs, Multi-Pot threats, denial-of-service (DoS), and WEP cracking attacks; DoS prevention disrupts malicious behavior and reclaims bandwidth for your authorized APs and clients, keeping your mission critical applications running at optimal efficiency

- **360 degree visibility into wireless traffic**
  - HP RF Manager enables customers to protect both wired and wireless networks from wireless vulnerabilities
  - by continuously scanning the airwaves, RF Manager automatically protects businesses against data leakage through the wireless network
  - RF Manager can rapidly and proactively detect and eliminate threats through accurate and robust automated classification of wireless devices including smartphones and tablets

- **Simplified and comprehensive reporting tools**
  automated report generation and delivery make complex wireless audits a "hands-off" process

- **Scalable from midmarket to large enterprise**
  - supports all HP wireless solution
  - manage up to 250 sensors per HP RF Manager (J9521A) or up to 600 sensors per HP RF Manager for VMware (J9838AAE);
QuickSpecs

Overview

(note that controllers prior to J9521A support a lower maximum number of sensors)

- **Advanced WIPS option**
  - WLAN Performance Management summarizes issues with configurable alerts on bandwidth, configuration, RF coverage, and interference status, has customizable controls for severity, display, notification, and real-time alerts of performance events
  - Smart Forensics enables two-click drill down for accurate threat detection/analysis, physical location tracking, and audit trails of system/admin actions
  - supported only on RF Manager v6.0 and later

**Technical features**

- **Wireless IDS/IPS features**
  - accurately autoclassifies APs and client devices using patented autoclassification techniques to block genuine threats
  - automatically prevents denial-of-service attacks and more than 20 threats simultaneously from a single sensor while continuing to scan for threats
  - pinpoints the physical location of vulnerable or threat-posing devices
  - blocks unauthorized traffic without network disruption
  - detects and locates non-WiFi interference and RF jamming

- **Protection against rogue IEEE 802.11a/b/g/n access points and wireless networks**
  - leverages the HP MSM415 sensor to provide 24x7 security detection and prevention capabilities for the wireless network

- **WEP cracking and impersonation attacks**
  - protect against active WEP cracking and impersonation attacks

- **Identification of performance problems**
  - occurs proactively before impact to end users; categorizes the potential source, such as configuration issues (specifically incorrect channel allocation, sub-optimal IEEE 802.11n protocol settings), bandwidth (poor utilization, low average, data rate, excessive overhead), and RF (non-WiFi interference, channel crowding)

- **Integration with HP MSM Controller**
  - reduces administration time and effort through automatic synchronizing of authorized APs and clients with MSM controllers

- **Central management of security policies**
  - gives administrators the flexibility to customize wireless security policies with site-specific guidelines

- **Out-of-the-box and custom reports**
  - emailed hourly, daily, or at custom-defined intervals, these reports help to ensure that administrators always have the essential information they need to manage the network effectively

- **Automated regulatory compliance reporting**
  - simplifies performing internal and regulatory audits with easy-to-use auditing and reporting tools
  - predefined reports map wireless vulnerabilities to specific data security compliance standards, such as PCI, Sarbanes-Oxley (SOX), HIPAA, Gramm-Leach-Bliley (GLBA), and DoD Directive 8100.2
  - on-wire/off-wire classification filters neighboring devices from the reports, eliminating the guesswork and time needed to validate vulnerability scans

- **Roles-based administrative rights**
  - provide the proper levels of security and management access over the network and the RF Manager Controller management interface

- **Location-based policy management**
  - simplifies the security and administration of a distributed WLAN deployment through granular, customizable policies localized on a site-by-site, region-by-region or even floor-by-floor basis.

- **Offline sensor operation**
  - provides full security coverage (detection, classification, and prevention) even when there is no connectivity between the sensor and the RF Manager
  - raises alerts/events, stores them, and synchronizes them with the RF Manager on reconnection
Overview

- **Integration with HP RF Planner**
  allows importing of planning and device placement information from HP RF Planner

Warranty and support

- **Lifetime warranty**
  for the MSM415 RF Security Sensor, for as long as you own the product, with next-business-day advance replacement (available in most countries)†

- **1-year warranty**
  for the RF Manager Controller with next-business-day advance replacement (available in most countries); warranty extensions are available

- **Software releases and warranty**
  software for the RF Manager Controller, RF Manager for VMware, and MSM415 RF Security Sensor include 1 year of defect fixes; for details on the software releases available with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary);
  to find software for your product, refer to [www.hp.com/networking/support](http://www.hp.com/networking/support)

- **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](http://www.hp.com/networking/contact-support); for details on the duration of support provided with your product purchase, refer to [www.hp.com/networking/support](http://www.hp.com/networking/support)

†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 andServices 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](http://www.hp.com/networking/warranty).
HP RF Manager Controller with 50-sensor License (J9521A)

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: 17.32(w) x 15.38(d) x 1.75(h) in (43.99 x 39.07 x 4.45 cm)
- Weight: 13.45 lb (6.1 kg)

Mounting
- Mounts in an EIA-standard 19 in. 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 humidity: 15% to 80%, noncondensing
- Nonoperating/Storage temperature: -40°F to 149°F (-40°C to 65°C)
- Nonoperating/Storage relative humidity: 15% to 80%, noncondensing

Electrical characteristics
- Frequency: 50/60 Hz
- Maximum heat dissipation: 434 BTU/hr (457.87 kJ/hr)
- Voltage: 100-127/200-240 VAC
- Current: 2/1 A
- Maximum power rating: 127 W

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

Immunity
- Generic: EN 55024
- Harmonics: EN 61000-3-2, IEC 61000-3-2
- Flicker: EN 61000-3-3, IEC 61000-3-3

Features
- Default supported sensors: 50
- Maximum supported sensors: 250 (via optional RF Manager 50-sensor upgrade purchases, J9399A or J9399AAE)

Notes
- HP RF Manager requires use of the HP MSM415 RF Security Sensor.

Services
- 3-year, parts only, global next-day advance exchange (UH199E)
- 3-year, 4-hour onsite, 13x5 coverage for hardware (UH196E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware (UH197E)
- 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UH198E)
- 3-Year, 9x5 SW phone support, software updates (UU104E)
- 3-year, 24x7 SW phone support, software updates (UU105E)
- 1-year, post-warranty, parts only, global next-day advance exchange (UH200PE)
- 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR999E)
- 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (UH201PE)
- 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (UH202PE)
- 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HS001E)
- 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HS002E)
### HP RF Manager for VMware 50 Sensor E-LTU (J9838AAE)

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

**Immunity**
- **Generic**: EN 55024
- **Harmonics**: EN 61000-3-2, IEC 61000-3-2
- **Flicker**: EN 61000-3-3, IEC 61000-3-3

**Features**
- Default supported sensors: 50
- Maximum supported sensors: 600 (via optional RF Manager 50-sensor upgrade purchases, J9399A or J9399AAE)

**Notes**
- HP RF Manager for VMware requires use of the HP MSM415 RF Security Sensor. HP RF Manager for VMware does not include a VMware license.

**Services**
- 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.

### HP MSM415 RF Security Sensor (J9522A)

**Ports**
- **1 RJ-45 autosensing 10/100/1000 port (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**: 5.19(w) x 6.16(d) x 1.94(h) in (13.18 x 15.65 x 4.93 cm)
- **Weight**: 0.72 lb (0.33 kg) mounting bracket
- **Enclosure**: Indoor, plenum rated

**Mounting**
- Includes two Mounting Clips

**Environment**
- **Operating temperature**: 32°F to 122°F (0°C to 50°C)
- **Operating relative humidity**: 5% to 95%, noncondensing
- **Non-operating/Storage temperature**: -40°F to 158°F (-40°C to 70°C)
- **Nonoperating/Storage relative humidity**: 5% to 95%, noncondensing

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

#### Electrical characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC voltage</td>
<td>IEEE 802.3af PoE compliant for Gigabit Ethernet</td>
</tr>
<tr>
<td>Maximum power rating</td>
<td>8 W</td>
</tr>
<tr>
<td>Antenna</td>
<td>Dual-band 2.4/5 GHz omnidirectional antennas</td>
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<tr>
<td>Number of internal antennas</td>
<td>3</td>
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#### Safety

- UL 2043; UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1

#### Emissions

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

#### Immunity

- Generic EN 55024
- Harmonics EN 61000-3-2, IEC 61000-3-2
- Flicker EN 61000-3-3, IEC 61000-3-3

#### RF Exposure

- FCC Bulletin OET-65C; RSS-102

#### Features

- RF Sensor characteristics
  - Single (IEEE 802.11n/a/b/g), Radio Operation Modes; RF security, Operation Modes; Controlled
  - IEEE 802.11a/b/g/n
  - Maximum transmit power varies by country

#### Notes

The HP RF Manager IDS/IPS Controller (J9521A) or RF Manager for VMware (J9838AAE) is required to manage the HP MSM415 RF Security Sensor.

#### Services

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-year</td>
<td>4-hour onsite, 13x5 coverage for hardware (UN683E)</td>
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<tr>
<td>3-year</td>
<td>4-hour onsite, 24x7 coverage for hardware (UN684E)</td>
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<tr>
<td>3-year</td>
<td>4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UN686E)</td>
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<tr>
<td>3-year</td>
<td>24x7 SW phone support, software updates (UN685E)</td>
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<td>1-year</td>
<td>post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR939E)</td>
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<td>1-year</td>
<td>post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR940E)</td>
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<tr>
<td>1-year</td>
<td>post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR941E)</td>
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<td>4-year</td>
<td>4-hour onsite, 13x5 coverage for hardware (US013E)</td>
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<td>4-year</td>
<td>4-hour onsite, 24x7 coverage for hardware (US014E)</td>
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<td>4-year</td>
<td>4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US015E)</td>
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<td>4-year</td>
<td>24x7 SW phone support, software updates (US016E)</td>
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<td>5-year</td>
<td>4-hour onsite, 13x5 coverage for hardware (US017E)</td>
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<tr>
<td>5-year</td>
<td>4-hour onsite, 24x7 coverage for hardware (US018E)</td>
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<tr>
<td>5-year</td>
<td>4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (US019E)</td>
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<td>5-year</td>
<td>24x7 SW phone support, software updates (US020E)</td>
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<td>3 Yr 6 hr</td>
<td>Call-to-Repair Onsite (UW416E)</td>
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<tr>
<td>4 Yr 6 hr</td>
<td>Call-to-Repair Onsite (UW417E)</td>
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<tr>
<td>5 Yr 6 hr</td>
<td>Call-to-Repair Onsite (UW418E)</td>
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<td>1-year</td>
<td>6 hour Call-To-Repair Onsite for hardware (HR943E)</td>
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<td>1-year</td>
<td>24x7 software phone support, software updates (HR942E)</td>
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<td>1-year</td>
<td>24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS830E)</td>
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<tr>
<td>1-year</td>
<td>24x7 software phone support, software updates + 4 hour hardware exchange (HS831E)</td>
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<tr>
<td>3-year</td>
<td>24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS832E)</td>
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<tr>
<td>3-year</td>
<td>24x7 software phone support, software updates + 4 hour Hardware Exchange (HS833E)</td>
</tr>
<tr>
<td>4-year</td>
<td>24x7 software phone support, software updates + Next Business Day Hardware Exchange</td>
</tr>
</tbody>
</table>

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Technical Specifications

(HS834E)
4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS835E)
5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS836E)
5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS837E)

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.
**QuickSpecs**

**HP Mobility Security IDS/IPS System Series**

**Accessories**

**HP Mobility Security IDS/IPS System Series accessories**

**HP RF Manager Controller with 50-sensor License (J9521A)**

- HP RF Manager Additional 50-Sensor Upgrade E-LTU — J9399AAE
- HP RF Manager additional 50-sensor Upgrade License — J9399A

**HP RF Manager for VMware 50 Sensor E-LTU (J9838AAE)**

- HP RF Manager Additional 50-Sensor Upgrade E-LTU — J9399AAE
- HP RF Manager additional 50-sensor Upgrade License — J9399A

To learn more, visit: [www.hp.com/networking](http://www.hp.com/networking)

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