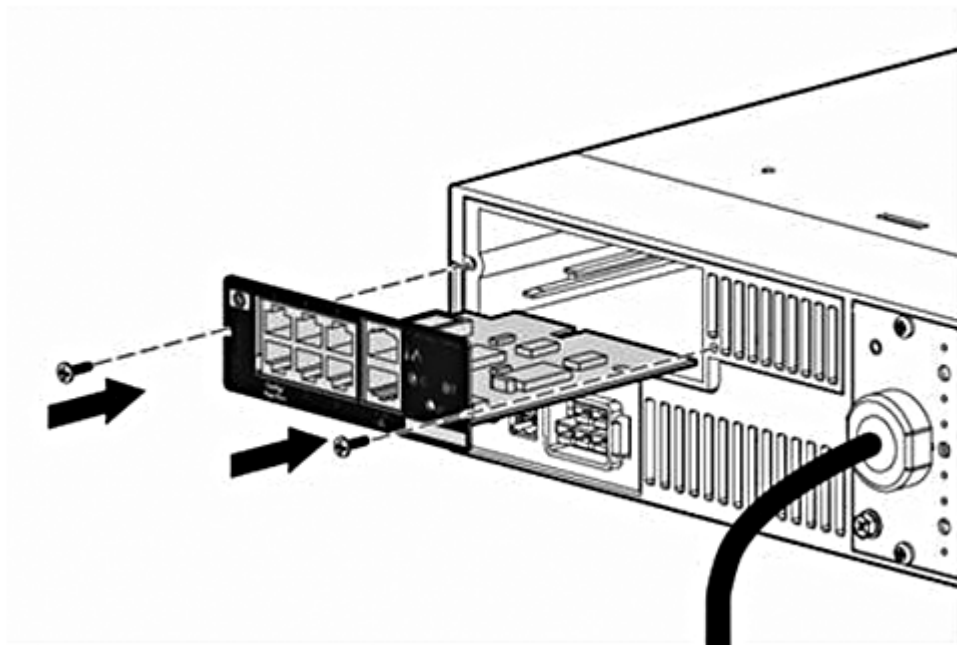


### Overview

The HP UPS Management Module enables you to monitor and manage power environments through comprehensive control of HP UPSs. The HP UPS Management Module can support either a single UPS configuration or provides additional power protection with support for dual redundant UPS configuration for no-single-point-of-failure. The additional serial ports will provide greater power management control and flexible monitoring.

The management module can be configured to send alert traps to HP Systems Insight Manager and other SNMP management programs or used as a standalone management system. This flexibility enables you to monitor and manage UPSs through the network. To facilitate day-to-day maintenance tasks, the embedded management software provides detailed system logs.

The HP UPS Management Module provides remote management of a UPS by connecting the UPS directly to the network. Configuration & Management of the UPS from anywhere and at anytime via a standard web browser.



### Models

HP Management Card for XR UPS

AF401A

HP RJ45-DB89 DCE Female 5 Pack Serial Adapter

AF402A

### Kit Contents

- Installation Guide
- Warranty Card
- Option Card
- RS-232 to RJ45 Adapter



### Standard Features

**HP UPS Management Module** The HP UPS Management Module enables you to configure, monitor and manage power environments through comprehensive control of individual HP UPSs.

Access the management module:

- Remotely through a Web browser
- Remotely through a Telnet session
- Locally through a terminal emulation program

The management module can be configured to send alert traps to HP Systems Insight Manager and other SNMP management programs or used as a standalone management system. This flexibility enables you to monitor and manage the UPS through the network connector; the serial connector located on the front of the management module is only used for configuration. To facilitate day-to-day maintenance tasks, the firmware provides detailed system logs.

Use the management module firmware to:

- Customize alerts
  - Send email notification messages
  - Send SNMP traps
- Monitor and manager UPSs
  - Manage independent UPS load segments to provide separate power control of connected equipment
  - Display text logs for analysis
- The HP Srl Adptr RJ45-DB89 will allow customers to directly attach up to 5 servers to the UPS management module.

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### Product Features

- Easy monitoring and management of UPS using web browser.
- Remote monitoring and control of UPS and attached devices.
- Real-time email alarm notification
- Support for standard HP MIB
- SSL data encryption and authentication
- Multiple serial ports provide greater power management control and flexible monitoring
- Independent control of serial ports gives load shedding capability for maximum runtime of critical loads.
- Simultaneously provides RS-232 monitoring.
- Plug and Play protocol for easy configuration
- Monitors the status of the UPS and performs diagnostics
- Manages a graceful shutdown of attached equipment during a utility power failure
- Manages independent UPS load segments to provide separate power control of connected equipment
- Prioritizes the timing of equipment shutdown and reboots connected equipment by load segment
- Delays restart by load segment after a power outage to sequence the startup of system components
- Shuts down and reboots the UPS and attached equipment, based on an user specified schedule
- Sends customized email and broadcast notification messages and SNMP traps
- Issues computer commands at power failure
- Displays logs for analysis
- Supports a redundant UPS configuration
- Includes enhanced HP SIM integration
- Includes multi-language support
- Supports serial and network attached server communications



### Standard Features

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- Supports a customizable Events script

### Highlights

Use HP Systems Insight Manager to:

- Discover management modules. As part of the discovery process, HP SIM can detect an installed management module. The web interface for the discovered module can be launched from the HPSIM Servers Links tab.
- Receive SNMP traps from the management module. The module can send event-based traps to HPSIM that include a URL in the trap. This functionality enables administrators to easily launch the web interface of the module in context. For example, if the management module detects an alarm condition, the module can send a trap to HP SIM with an attached hyperlink that routes users directly to the Overview screen for the attached PDU.
  - Conveniently launch the management module web interface from within HP SIM. Tools menu-Users can add a link to the web interface on the HP SIM Tools menu using a tools definition file.
  - Event-based trap-A URL is included in each trap to link directly from HP SIM to the Overview screen for the specific device for which the trap was sent.
  - Access to the management module can also be done by clicking on the Management Module link that is automatically created when the HP PDU Management Module is discovered by HPSIM.

### Security Considerations Overview

- The management module implements strict security for two important reasons:
  - The module monitors devices that have the potential to perform operations that are sensitive and destructive.
  - The management module has browser accessibility.
- To better ensure the security of the management module and the devices it manages, consider the following topics in accordance with your organization's security policies and the environment in which the module will operate.
  - Remote access to the management module requires a user account. Logging in requires the use of a user name and password, which should be kept properly secured.
  - Each account in can be given different access levels, providing different capabilities. Ensure that the appropriate access level is granted to users.
  - Browsing to the management module can be done using SSL, which encrypts the data between the browser and management module. The module is supported by a 128-bit encryption level. SSL also provides authentication of the management module by means of its digital certificate. Securely importing this certificate must be done to ensure the identification of the management module.

### Warranty

HP UPS Management Modules are backed by a limited 3-year warranty



### *Service and Support*

**HP Care Pack Information** For HP Care Pack (hardware & software) information, as well as orderable part numbers, please refer to the following web site: <http://h18005.www1.hp.com/services/carepaq/index.html>



## *Related Options*

HP Care Pack Services

HP Install Rack and Rack Options Service

U2871E



### Technical Specifications

**Mechanical Dimensions** 4.40 x 1.50 x 4.50 in (111.9 x 38.5 x 114.0 cm)  
(WxHxD)

**Unit Weight** 1.0 lb (.46 kg)

**Shipping Dimensions** 8.5 x 2.3 x 9.7 in (21.59 x 5.84 x 24.62 cm)  
(WxHxD)

**Shipping Weight** 2.0 lb (.92 kg)

**Operating Temperature** 50° to 104° F (10° to 40° C)

**Operating Relative Humidity (%)** 20% to 80 % relative humidity non-condensing

**Operating Elevation** 0 to 10,000 ft (0 to 3048 m)

**Storage Temperature** -4° to 140° F (-20° to 60° C)

**Storage Relative Humidity (%)** 5% to 95 % relative humidity non-condensing

**Storage Elevation** 0 to 49,000 ft (0 to 14935 m)

**Web Browser Client**

- Microsoft® operating systems
- Microsoft Internet Explorer 6.0 with Service Pack 1 (32-bit only)
- Red Hat Linux operating system (32-bit only) ; Mozilla 1.4 or later
- SUSE Linux 10 operating system (32-bit only); FireFox
- SUSE Linux 9 operating system (32-bit only) ; Mozilla 1.4 or later

**Plug-in** Macromedia Flash Player 7.0 (available at the Macromedia website (<http://www.macromedia.com>))

**Monitor Resolution**

- Minimum supported resolution of 1024 x 768, 16-bit
- high color (maximize browser window for optimal display)

Supported UPS	Availability	VA Rating	Watts	U Height	Load Seg.	UPS Part Numbers
R36000/3 (3-Phase UPS)	Yes	36000 (24000 N+1)	36000 (24000 N+1)	Pre-mounted in 10kG2 42Urack	1	AF439A
R12000/3 (3-Phase UPS)	Yes	12000	12000	6	1	AF430A
R8000/3 (3-Phase UPS)	Yes	8000	8000	6	1	AF432A
R1500 G2	Yes	1500	1050	1	2	AF419A
R3000 - Low Voltage	Yes	2880	2700	2	3	AF422A, AF425A (Replaces non-RoHs compliant part number 192186-001)
R3000 - High Voltage	Yes	3000	2700	2	3	AF423A, AF414A, AF424A (Replaces non-RoHs compliant part number 192186-002)
R5500	Yes	5000	4500	3	2	AF426A (Replaces non-RoHs compliant part number 326529-D71)
R1500xr	Legacy	1500		2u	2	204404-001



### Technical Specifications

R3000xr - Low Voltage	Legacy	2880	2700	2	3	192186-001
R3000xr - High Voltage	Legacy	3000	2700	2	3	192186-002, J4367-7001, J4367-70004, 5065-7258, 5065-7260
R5500xr	Legacy	5000	4500	3	2	326529-D71
T1000xr	Legacy	1000	700	na	2	204155-001
T1500xr	Legacy	1440	1050	na	2	204155-002
T2200xr	Legacy	1920	1600	na	3	204451-001, -002

Operating System	Service Pack	Platform x86	Platform x64	Platform IA64
<b>Windows</b>				
Windows Server 2008 R2 - Enterprise Edition, DataCenter, Standard	SP1		x	
Windows Server 2008 R2 - Enterprise Edition, DataCenter, Standard			x	
Windows Server 2008 - Enterprise Edition, DataCenter, Standard	SP2	x	x	x
Windows Server 2003 R2 - Enterprise Edition, Standard	SP2	x	x	x
Windows Server 2003 - Enterprise Edition, Standard	SP2	x	x	x
Windows Small Business Server 2008	SP2	x	x	x
Windows Small Business Server 2003 R2	SP2	x	x	x
Windows 7 - Enterprise		x	x	
Windows Vista - Enterprise	SP2	x	x	
Windows XP Professional	SP3	x	x	
<b>Linux</b>				
Red Hat Enterprise Linux 5	U7	x	x	x
Red Hat Enterprise Linux 5	U5	x	x	x
Red Hat Enterprise Linux 4	U8	x	x	x
SUSE Linux Enterprise Server 11	U1	x	x	x
SUSE Linux Enterprise Server 10	SP3	x	x	x
<b>HP-UX</b>				
HP-UX 11i v3 - (see note1 & required patches)				x
HP-UX 11i v2 - (see note1 & required patches)				x
<b>VMware</b>				
ESX Server 4.1			x	
ESX Server 4.0	U1		x	
ESX Server 3.5	U5	x		
<b>Browsers</b>				
Windows Internet Explorer 8		x	x	x
Windows Internet Explorer 7	SP2	x	x	x
Windows Internet Explorer 6	SP1	x	x	x
HP-UX Mozilla 1.6x		x		
HP-UX Mozilla 1.4				x
Linux Firefox 3.0.18		x	x	x



### Technical Specifications

Notes	
1) Supported on PA-RISC	
NOTE: As a plug-in into HP Systems Insight Manager (HPSIM), users now have the ability to discover HP UPS Management Module, send and receive SNMP traps and launch HP Management Module from the HPSIM Tools menu and Link tab.	

#### Environment-friendly Products and Approach

#### End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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