
**Emerson Network Power® RPC2™
Communications Module
Release Notes
Version 9.0.0.6_94414 Firmware
September 28, 2015**

This document outlines:

1. Version and Compatibility Information
2. Features and Enhancements
3. Upgrade Instructions
4. Known Issues

1. Version and Compatibility Information

This release contains firmware version RPC2_9.0.0.6_94414 and is compatible with the following devices and software:

- Emerson Network Power® RPC2™ rack PDU communication card
 - The following communication protocols are supported with the RPC2 communication card:
 - HTTP/HTTPS
 - Emerson Velocity Protocol
 - Remote Service Delivery Protocol
 - Email
 - SMS
 - Emerson CLI
 - SNMP v1, v2c, v3
- Emerson Network Power® MPH2™ power distribution unit
- Liebert® MPH™ power distribution unit
- Liebert® MPX™ power distribution unit
- Avocent® MergePoint Unity™ KVM over IP and serial console switch
- Avocent® ACS 6000 advanced console server
- Avocent® Universal Management Gateway appliance
- Avocent® DSView™ management software
- Avocent® Rack Power Manager software
- *Trellis*™ real-time infrastructure optimization platform
- Nform® software

- SiteScan® software

Browser Compatibility Table

Supported Browsers	Version
Microsoft® Internet Explorer®	IE9, IE10, IE11
Mozilla Firefox®	28.0
Google Chrome™	34.0.1847.116m
Safari® (MacBook®)	6.1.1
Safari (iPad®)	7.1

2. Features and Enhancements

Release Features Table

Features/Enhancements	Description
MPH2 Devices	Reboot supported through the LCD/touch key interface. The LCD format is also changed to emphasize voltage measurement.
Command Line Interface (CLI)	Support added for Unbalanced Load Alarm threshold setting.
Configuration	The Power Up state supports On/Off/Restore for MPH2 PDU models only. Restore is the factory default. The reliability of the array setup is approved.
Event Notification	Detection of line and neutral swap for single phase L-N MPH2 PDU models; detection of loss of load for MPH2-B models. A Loss of Load event is detected after a branch current is measured below the Load New threshold after previously exceeded the branch current rating. Manual event clearing is required/done in the System/Device Change/Active Events. Hardware operational status support was also added for MPH2 PDU models.
Security	Upgraded to SSHv2.
General Enhancements	Improved the firmware update process, including percent (%) progress reporting and more reliable management of units in an array. The Software Over-Temperature Protection (SWOTP) feature can affect all units of the array. Scope may be selected between local (default, where temperature sensor is attached) and array.

Release Fixes Table

Feature Fix	Description
Web Interface	When using the F5 function key to refresh the web page, the current page will display after and not jump to the Summary page. The rack PDU factory default label is now assigned as Rack PDU. The browser now redirects to and from HTTPS after the setting is changed and the unit is rebooted.
MPH2 Devices	Improved fault tolerant recovery of the MPH2 device communication, including retries. Consistent sequential receptacle power up with one second interval delay if the Power On delay is set to zero. The Line LEDs reflect both voltage and current input conditions. Extended eight second hysteretic qualification of Load New/Absent and alarm threshold monitoring.
MPX and MPH devices	Added hysteretic monitoring for Load New/Absent detection for MPXBRM. Increased allowance for DC component level for RMS measurement.
SNMP	Traps are sent for events generated by array units. System information is saved after reboot.
Configuration	Independently modify settings and asset tag information. Adding group receptacle assignments for fourth array unit. Configurations are now inherited from previously undiscovered MPXBRMs. The factory default for Unbalanced Load Alarm threshold is now zero (off) for MPH2 devices.
Event Notification	Filtering on Events Description field
Security	Patch for Apache 2.4 web server, added web session and authentication management on Apache and internal web servers and disabled directory indexing.
Sensors	Added hysteretic monitoring to reduce excessing event notifications and added a data integrity check to eliminate corrupted data processing.
General Fixes	Corrected plug type reporting for MPH2 models with IEC 20 inlet. Special characters may now be used for all user-editable fields.

3. Upgrade Instructions

The RPC2™ communications module may be updated to this firmware using the Web-based Firmware Update feature described in Section 4.8.4 (System Tab- Firmware Update) of the RPC2™ Communications Module User Manual (R09-14, SL-20841).

4. Known Issues

Feature	Description	Workaround
Web Interface	Older browser versions may not correctly render certain graphical features.	Use only compatible browsers' versions advised above.
	A non-maximized window may hide some tabs.	For best experience, the recommended minimum horizontal resolution is 1200px. For resolutions lower than 900px, zoom out to view the full content.
	If Adware/virus in the host PC, accessing it will cause reboots.	Not available at this time
	The web browser's measurement status bars do scroll correctly when the vertical scroll bar is active.	Not available at this time
SNMP	No validation of logical consistency for threshold settings.	Not available at this time
Command Line Interface (CLI)	When using CLI to control the power or set thresholds values, a three second delay is required before the updated values or states can be read back correctly.	Not available at this time
	Telnet session is delayed approximately 20 seconds when static IP is configured.	Clear DNS settings.
Configuration	MPH2-C models factory defaults for Power Up state is On, instead of Restore.	Not available at this time
Sensors	Unexpected Sensor New/Absent events may occur.	Disable New and Absent Sensor notifications.
Network	Some IPv6 functionality not working.	Not available at this time
	HTTPS does not work on Link port.	Not available at this time
	Interaction between DHCP mode and array auto-discovery process can cause Network and Link ports to stop working.	Do not connect cable at Network port to another network device until DHCP is active. If ports stop working, reboot card by pressing recessed pushbutton once or uninstall/reinstall RPC2.
Miscellaneous	Internal process handshake may fail and cause RPC2 to lockup.	Reboot card by pressing recessed pushbutton once or uninstall/reinstall RPC2.
	After firmware update, unit's Line LEDs may still be flashing and RPC2 reports failed firmware update.	Retry firmware update.

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