

What's New in PowerLogic™ PM5650 Firmware Version 4.14.0

Firmware v4.14.0 represents a major networking and security evolution of the PM5500 platform. This release modernizes the meter's communication stack, introduces full IPv6 capability, and strengthens cybersecurity foundations while maintaining backward compatibility and operational stability expected in demanding environments.

Native IPv6 Enablement – Ready for Next-Generation Networks

PM5650 meters now provide complete IPv6 support, enabling seamless integration into modern IT and OT network architectures.

- Flexible IP operation modes are now supported:
 - IPv4-only
 - IPv4 and IPv6 dual-stack
 - IPv6-only operation with complete IPv4 disable
- Existing features and applications continue to operate transparently over IPv6 without reconfiguration
- IPv6 is supported with both Link-Local and Global address scopes, enabling local commissioning as well as routed enterprise deployments

This enhancement allows meters to operate cleanly in IPv6 mandated environments, including large-scale data centres, utilities, and future-ready industrial networks.

Expanded Protocol Support Over IPv6

Firmware v4.14.0 extends IPv6 capability across the PM55xx communication ecosystem:

- Modbus TCP
- SNMP
- FTPS
- HTTPS
- DPWS
- SNTP
- SMTP

This ensures uninterrupted interoperability with energy management systems, monitoring tools, and automation platforms as networks transition beyond IPv4.

Comprehensive IPv6 Configuration & Management

IPv6 configuration and operation are fully integrated into existing workflows:

- IPv6 parameters can now be configured via:
 - Embedded web interface
 - Front-panel HMI
 - ION Setup software
- Device logs can be exported directly over IPv6
- Firmware upgrades can now be performed using IPv6 connectivity

Engineers can deploy, manage, and maintain meters in IPv6 environments without introducing parallel IPv4 dependencies.

Security-First Networking Enhancements

Security remains a core design principle in this release:

- IP filtering support extended to IPv6, enabling controlled access policies in dual-stack and IPv6-only deployments
- Enhanced cybersecurity hardening applied across the communication stack

These measures align PM5500 meters with modern cybersecurity expectations for connected operational technology.

Improved Display Robustness for Long-Term Operation

To enhance long-term reliability in continuous operation environments:

- A timed display refresh mechanism has been introduced
- This improves display stability and ensures consistent visual output during extended device uptime

The result is a more robust HMI experience.

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Fix for Comtrade File Download Error

The file permission error encountered while downloading waveform COMTRADE binary (.bin) and configuration (.cfg) files through FTP has been fixed.

Fix for Extra Byte Issue in Modbus Exception Responses

- Resolved an issue where an extra byte was included in Modbus exception response packets due to incorrect message parsing.
- The fix ensures proper packet formatting and accurate interpretation of exception codes.

Upgrade Recommendations

Before upgrading to this firmware version:

- Backup all meter data.
- Use the webpage or upgrade tool v4.0
- Refer to the User Manual for upgrade procedures and prerequisites.

More Information and Resources

Visit www.se.com to download:

- Firmware upgrade files
- Latest ION Setup and web page templates
- Technical notes and user manuals
- Installation guides and datasheets

In case of further support, please contact local Schneider Electric customer care centre

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