



PowerLogic™ PM5561 Firmware Revision History

Summary of Firmware Releases (Public) for PowerLogic™ PM5561

| Release Version | Date         | Reset System | Download System | Operating System | Language File | FPGASystem | Comms System | DLF3000 File Name                            | Upgrade File Name             |
|-----------------|--------------|--------------|-----------------|------------------|---------------|------------|--------------|--|-------------------------------|
| 12.4.1          | 24-NOV-2025  | 12.4.1       | NA              | 12.4.1           | 3.0.1         | 2.0.3      | 12.4.1       | NA. through webpage firmware can be upgraded | PM5561_upgrade_12.4.1_Release |
| 12.3.0          | 25-SEP-2024  | 12.3.0       | NA              | 12.3.0           | 3.0.1         | 2.0.3      | 12.3.0       | NA. through webpage firmware can be upgraded | PM5561_upgrade_12.3.0_Release |
| 12.2.0          | 23-MAY-2024  | 12.2.0       | NA              | 12.2.0           | 3.0.1         | 2.0.3      | 12.2.0       | NA. through webpage firmware can be upgraded | PM5561_upgrade_12.2.0_Release |
| 12.1.0          | 15-DEC-2023  | 12.1.0       | NA              | 12.1.0           | 3.0.1         | 2.0.3      | 12.1.0       | NA. through webpage firmware can be upgraded | PM5561_upgrade_12.1.0_Release |
| 12.0.4          | 25-APR-2022  | 12.0.4       | NA              | 12.0.4           | 3.0.1         | 2.0.3      | 12.0.4       | NA. Supported via FTP download               | PM5561_V12.0.4_UTv3.4_Release |
| 10.8.2          | 01-DEC-2020  | 10.8.2       | NA              | 10.8.2           | 2.19.0        | 2.0.3      | 10.8.2       | NA. Supported via FTP download               | PM5561_V10.8.2_Release        |
| 10.7.0003       | 12-OCT-2020  | 10.7.0003    | NA              | 10.7.0003        | 2.18.0        | 2.0.3      | 10.7.003     | NA. Supported via FTP download               | PM5561_upgrade_10.7.3_Release |
| 10.7.2          | 11-OCT-2020  | 10.7.2       | NA              | 10.7.2           | ---           | 2.0.3      | 10.7.2       | NA. Supported via FTP download               | PM5561_V10.7.2_Release        |
| 10.7.0001       | 13-MAR-2019  | 10.07.0001   | NA              | 10.07.0001       | ---           | 2.0.3      | 10.07.0001   | NA. Supported via FTP download               | PM5561_V10.7.1_Release        |
| 10.6.0004       | 05-JUN-2018  | 10.06.0004   | NA              | 10.06.0004       | ---           | 2.0.3      | 10.06.0004   | NA. Supported via FTP download               | PM5561_V10.6.4_Release        |
| 10.6.0003       | 14-MAR-2018  | 10.06.0003   | NA              | 10.06.0003       | ---           | 2.0.3      | 10.06.0003   | NA. Supported via FTP download               | PM5561_V10.6.3_Release        |
| 10.06.0002      | 31-JAN-228   | 10.06.0002   | NA              | 10.06.0002       | ---           | 2.0.3      | 10.06.0002   | NA. Supported via FTP download               | PM5561_V10.6.2_Release        |
| 10.06.0001      | 08-JAN-2018  | 10.06.0001   | NA              | 10.06.0001       | ---           | 2.0.3      | 10.06.0001   | NA. Supported via FTP download               | PM5561_V10.6.1_Release        |
| 10.06.0000      | 23-NOV-2017  | 10.06.0000   | NA              | 10.06.0000       | ---           | 2.0.3      | 10.06.0000   | NA. Supported via FTP download               | PM5561_V10.6.0_Release        |
| 10.05.0000      | 04-OCT-2016  | 10.05.0000   | NA              | 10.05.0000       | ---           | 2.0.3      | 10.05.0000   | None. Cannot update MID meters               | NA                            |
| 10.04.0000      | 04-MAR-/2016 | 10.04.0000   | NA              | 10.04.0000       | ---           | 2.0.3      | 10.04.0000   | None. Cannot update MID meters               | NA                            |
| 10.03.0001      | 27-OCT-2015  | 10.03.0000   | NA              | 10.03.0001       | ---           | 2.0.3      | 10.03.0001   | None. Cannot update MID meters               | NA                            |
| 10.03.0000      | 03-OCT-2015  | 01.01.0      | NA              | 10.03.0000       | ---           | 2.0.3      | 10.03.0000   | None. Cannot update MID meters               | NA                            |
| 10.02.0000      | 02-OCT-2015  | 01.01.0      | NA              | 10.02.0000       | ---           | 2.0.3      | 10.02.0000   | None. Cannot update MID meters               | NA                            |
| 10.01.0000      | 03-DEC-2014  | 01.01.0      | NA              | 10.01.0000       | ---           | 2.0.3      | 10.01.0000   | None. Cannot update MID meters               | NA                            |
| 10.00.0000      | 21-AUG-2013  | 01.00.0      | NA              | 10.00.0000       | ---           | 2.0.3      | 10.00.0000   | None. Cannot update MID meters               | NA                            |

| Version Number | Changes Since Version: | Description of Changes   |
|----------------|------------------------|--|
| 12.4.1         | 12.3.0                 | <b>Official public release for 12.4.1 with OS Checksum 0xEE6A</b> <ul style="list-style-type: none"><li>Modified Chip Select (CS) pin behaviour for display interface: Default CS state set to high (1). CS is driven low (0) only during data transmission.</li><li>During power up display RST pin signals timings updated</li><li>Clock frequency of display SPI is updated to 5.25MHz</li></ul> <b>Fixed Defect: -</b> <ul style="list-style-type: none"><li>Resolved issue where the meter IP address incorrectly fell to 255.255.255.255.</li><li>Fixed problem causing the meter to remain stuck in “waiting for host” during firmware upgrade.</li><li>Enabled device log export functionality.</li><li>Fixed data log display issues on the webpage.</li></ul>  |
| 12.3.0         | 12.2.0                 | <b>Official public release for 12.3.0 with OS Checksum 0x505B</b><br><b>Fixed Defect: -</b> <ul style="list-style-type: none"><li>DNP3 network disconnection issue fixed.</li><li>Blank display and scattered display issue fixed.</li></ul>   |
| 12.2.0         | 12.1.0                 | <b>Official public release for V12.2.0 with OS Checksum 0xE591</b><br><b>Fixed Defect: -</b> <ul style="list-style-type: none"><li>PF round off to 1 when PF is more than +/-0.9965 and setting KVAR to zero is removed. Only calculated value of KVAR and PF are available</li></ul>  |
| 12.1.0         | 12.0.4                 | <b>New Feature</b> <ul style="list-style-type: none"><li>Stack upgraded from Monaco to mbedtls</li><li>Weak cipher suites (CBC mode) are disabled</li></ul> Warning banner for webpage as configurable <ul style="list-style-type: none"><li>CSRF token implemented for webpage service</li><li>DHCP input parameter is configurable to MACID or DeviceID</li><li>Upgraded the web client jquery to V3.6.4</li><li>Configurable Pulse width for Digital outputs</li></ul> <b>Fixed Defect:</b> <ul style="list-style-type: none"><li>Ping loss issue fixed</li><li>Unencrypted Web Pages: The ability to use an HTTP connection exists bug fixed</li><li>EIP Reset service is disabled</li><li>Phase loss alarm malfunctioning issue fixed</li><li>HTTPS disable/Enable option provided</li><li>User Account management issue fixed</li><li>EIP implicit message connectivity issue fixed</li><li>Blank display for RMS values for 1 to 2 seconds when there is a change in value from 99 to 100 or 999 to 1000 in LCD display</li></ul> |



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| 12.0.4     | 10.08.2    | <p>NOTE:</p> <ol style="list-style-type: none"><li>Once upgraded to version 12.x.x from 10.x.x, you cannot downgrade to 10.x.x</li><li>For upgrading to 12.x.x first time from 10.x.x, you must use PM55xx Firmware Upgrade Tool software in the upgrade package</li><li>After upgrading to 12.x.x first time from 10.x.x, the default password (to set new password) for Administrator account is the meter's MAC address in UPPER case (For example, for a meter with MAC address 00:80:6B:4C:30:AD, the default password would be 00806B4C30AD)</li></ol> <p>New Feature</p> <ul style="list-style-type: none"><li>HTTP replaced with more secure HTTPS protocol and TLS 1.2 transport layer security</li><li>New webpage design and layout</li><li>Product Configuration via webpages restored</li><li>Future firmware upload now via secure webpage over HTTPS (not via FTP) for better user experience</li><li>Firmware binaries now packaged in single .SEDP format file</li><li>Encrypted firmware binaries to prevent malicious operation with FW</li><li>Digitally signed firmware to ensure authenticity of firmware before upgrade and during boot up</li><li>Improved Role based Access (RBAC) for better user management for the users defining and controlling privileges and rights</li><li>Improved Password management: Complex Password mandate -and- no algorithmically generated or hard-coded passwords - helps prevent unauthorized access to product <input type="checkbox"/> Account lockout policy for webpage (after consecutive failed attempts of login) - helps prevent unauthorized access to product <input type="checkbox"/> Secure FTP introduced (FTP is disabled by default), FTP automatic disable timeout is removed</li><li>Logging of firmware upgrade details and count are increased from 10 to 25.</li></ul> <p>Fixed Defect</p> <ul style="list-style-type: none"><li>Improved handling of "TCP Keepalive" and "Modbus TCP/IP Server Connection Idle Time" configurations</li></ul> |
| 10.08.2    | 10.7.3     | <p>New Feature</p> <ul style="list-style-type: none"><li>Energy Overflow Scaling feature added</li></ul> <p>Fixed Defect</p> <ul style="list-style-type: none"><li>At UPF VAR sometimes shows non-zero (higher) value when CT / PT ratio is High – Improved such that VAR reading will be more accurate in this condition</li></ul>   |
| 10.7.3     | 10.7.1     | <p>New Feature:</p> <ul style="list-style-type: none"><li>Firmware checksum in HMI (MB register number 20533)</li></ul> <p>Fixed Defect:</p> <ul style="list-style-type: none"><li>Affecting zero-day vulnerabilities from "Ripple20" in low-level TCP/IP software library developed by Treck, Inc.- Fixed</li><li>HTTP port number value is reset to default value after changed using MB commands. ( via ION setup )</li><li>BACnet setting not working when the device ID is 0</li><li>BBMD IP 0.0.0.0 Not accepted in commands even BBMD disabled</li></ul>   |
| 10.07.0001 | 10.06.0004 | <p>New Feature</p> <ul style="list-style-type: none"><li>Implemented the DNP3 Over Ethernet</li><li>HMI Language file change for Russian Language</li><li>Input metering accumulation backup frequency increased to one second</li><li>Added Model ID for PM5580 in HMI and webpages</li></ul>  |
| 10.06.0004 | 10.06.0003 | <p>Fixed Defect</p> <ul style="list-style-type: none"><li><input type="checkbox"/> Fixed the energy data retention issue for energy data accumulated within 1 minute of an auxiliary power cycle</li></ul>  |



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| 10.06.0003 | 10.06.0002 | <div>Fixed Defect</div> <ul style="list-style-type: none"><li>Changed the product name from PM55xx to actual model name (PM5560, PM5561, PM5562, PM5563) to follow ODVA standard</li><li>Fixed the Interface capability attribute value of EtherNet/IP Ethernet Link Object</li></ul>   |
| 10.06.0002 | 10.06.0001 | <div>Fixed Defect</div> <ul style="list-style-type: none"><li>Encapsulation timeout of TCP/IP object (Ethernet/IP) is now stored in non-volatile memory.</li><li>Fixed the speed, duplex and Interface Label attributes of Ethernet Link Object in Ethernet/IP</li></ul>  |
| 10.06.0001 | 10.06.0000 | <div>Fixed Defect</div> <ul style="list-style-type: none"><li><input type="checkbox"/> Corrected odometer values for Base Energy object and Electrical energy objects</li></ul>   |
| 10.06.0000 | 10.05.0000 | <div>New Features</div> <ul style="list-style-type: none"><li>Firmware upgrade is now possible in MID meters.</li><li>Added Ethernet/IP protocol support</li><li>Option in both webpages and HMI (Front Display) to Disable/Enable Ethernet/IP feature.</li><li>Date/Time of firmware download, firmware version, communication channel and status of firmware download can now be read through Modbus registers.</li></ul> <div>Fixed Defect</div> <ul style="list-style-type: none"><li>Made heap management routines thread-safe to avoid potential heap corruption issues in firmware.</li><li>Made changes to trigger watchdog timer in cases of Fatal errors.</li></ul> |
| 10.05.0000 | 10.04.0000 | <div>New Features</div> <ul style="list-style-type: none"><li>Added DPWS Functionality to the PM55xx meters.</li><li>Added MAC-ID display in HMI .</li></ul> <div>Fixed Defect</div> <ul style="list-style-type: none"><li>Watchdog Timer is now enabled in the PM556x meter (enabled to address 255 IP issue).</li><li>Webpage new user password not stored at first time : Fixed</li></ul>  |
| 10.04.0000 | 10.02.0000 | <div>New Features</div> <ul style="list-style-type: none"><li>Added BMS Functionality to the PM55xx meters</li></ul> <div>Fixed Defect</div> <ul style="list-style-type: none"><li>Corrected issue where the QR Code PF Log 3084 urls were incomplete, the urls now functions properly.</li><li>Corrected issue where the QR Code KW Log register 3204 where the log contained one too many entries, the log now contains 75 entries.</li></ul>   |
| 10.02.0000 | 10.01.0000 | <div>QR Code Functionality</div> <ul style="list-style-type: none"><li>The meter now supports Enabling / Disabling of the QR code on the screen via the HMI or Modbus interface.</li><li>Four demand registers were added to the Data Logs which can be viewed on the Web Page</li></ul>  |
| 10.01.0000 | 10.00.0000 | <ul style="list-style-type: none"><li>The meter now supports two LCD displays (Varitronix and Tianma)</li><li>Added QR Code feature to the meter</li><li>Added Float32 registers in conjunction with INT64 registers <input type="checkbox"/> Input Metering bug fixes</li></ul> <div>Additional bug fixes</div>  |



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|------------|------|--|
| 10.00.0000 | None | <ul style="list-style-type: none"><li>• The system now updates RS code when updating OS code.</li><li>• Improve RS-485 communications.</li><li>• Enhance DLF support for daisy-chained meters.</li><li>• Provide saved Subnet Mask and Gateway settings even when no Ethernet connection is established.</li><li>• Provide more reliable display of power supply failure message and recovery.</li><li>• Fixed issue where ftp and http settings were not always applied immediately when saved.</li><li>• Fixed possible data corruption issue when saving FTP port, HTTP port, or ethernet configuration</li></ul> |
|------------|------|--|

Firmware version numbering system:  
xx.yy.tttt.zzzz

Per CR34  
xx = Major ( Hardware changes,etc.)  
yy = Minor ( feature add,etc.)  
tttt =Quality ( bug fixes, etc.)