



PowerLogic™ PM5560 & PM5563 Firmware Revision History

Summary of Firmware Releases (Public) for PowerLogic™ PM5560 & PM5563

Release Version	Date	Reset System	Download System	Operating System	Language File	FPGA System	Comms System	DLF3000 File Name	Upgrade File Name
2.7.7	20-Dec-2019	2.7.7	N/A	2.7.7	2.17.0	2.0.3	2.7.7	N/A	PM5560_PM5563_V2.7.7_Release
2.7.6	25-Sep-2019	2.7.6	N/A	2.7.6	2.16.0	2.0.3	2.7.6	N/A	PM5560_PM5563_V2.7.6_Release
2.7.4	20-Nov-2018	2.7.4	N/A	2.7.4	2.14.0	2.0.3	2.7.4	N/A	PM5560_PM5563_V2.7.4_Release
2.5.4	25-Jun-2018	2.5.4	N/A	2.5.4	2.10.0	2.0.3	2.5.4	N/A	PM5560_PM5563_V2.5.4_Release
2.5.3	03/12/2018	2.5.3	N/A	2.5.3	2.10.0	2.0.3	2.5.3	N/A	PM5560_PM5563_V2.5.3_Release
2.5.2	01/31/2018	2.5.2	N/A	2.5.2	2.10.0	2.0.3	2.5.2	N/A	PM5560_PM5563_V2.5.2_Release
2.4.3	10/16/2017	2.4.3	N/A	2.4.3	2.9.0	2.0.3	2.4.3	N/A	PM5560_PM5562_V2.4.3.zip
2.4.2	06/26/2017	2.4.2	N/A	2.4.2	2.8.0	2.0.3	2.4.2	N/A	PM5560_PM5562_V2.4.2.zip
2.3.0	3/14/2016	2.3.0	N/A	2.3.0	2.6.0	2.0.3	2.3.0	N/A	PM5560_PM5563_v2.3.0.zip
2.2.1	10/27/2015	2.2.1	N/A	2.2.1	2.1.0	2.0.3	2.2.1	N/A	PM5560_PM5563_v2.2.1.zip
2.2.0	10/06/2015	2.2.0	N/A	2.2.0	2.1.0	2.0.3	2.2.0	N/A	PM5560_PM5563_v2.2.0.zip
2.1.0	05/05/2015	2.1.0	N/A	2.1.0	2.0.1	2.0.3	2.1.0	N/A	PM5560_PM5563_v2.1.0.zip
2.0.1	03/03/2015	2.0.1	N/A	2.0.1	2.0.1	2.0.3	2.0.1	N/A	PM5560_PM5563_v2.0.1.zip
01.01.0000	10/06/2014	01.01.0000	N/A	01.01.0000	N/A	N/A	N/A	PM5560_ver_1_01_0000.fw	N/A
01.00.0004	07/03/2014	01.00.0004	N/A	01.00.0004	N/A	N/A	N/A	PM5560_63_ver_1_00_0004.fw	N/A
01.00.0003	02/05/2014	01.00.0000	N/A	01.00.0003	N/A	N/A	N/A	PM5560_63_ver_1_00_0003.fw	N/A
01.00.0002	08/21/2013	01.00.0000	N/A	01.00.0002	N/A	N/A	N/A	PM5560_63_ver1002.fw	N/A

Version Number	Changes Since Version:	Description of Changes
2.7.7	2.7.6	<b>Fixed Defect</b> <ul style="list-style-type: none"> <li>Applicable to PM5563 model only: Display stability when used with a PM5RD remote display unit – Improved</li> </ul>
2.7.6	2.7.4	<b>New Feature</b> <ul style="list-style-type: none"> <li>Option to select Average V-LL to be displayed on Summary Screen.</li> <li>Prompt user on web-page to update password from default to complex value for added security</li> <li>Added internal ID for new model PM5580</li> </ul> <b>Fixed Defect</b> <ul style="list-style-type: none"> <li>TCP ports unreachable after subjected to malformed Modbus requests – Improved</li> <li>Information disclosure in FTP Server – Prevented</li> <li>Input metering accumulation backup frequency increased to one second</li> </ul>
2.7.4	2.5.4	<b>New Features</b> <ul style="list-style-type: none"> <li>Support for PM55RD Display type selection in the webpages (Hardware versions Ax / Bx)</li> <li>Implemented DNP3 Protocol support over Ethernet</li> <li>Added options in LCD HMI and Web Page to Enable/Disable the DNP3 over Ethernet feature</li> </ul> <b>Fixed Defect</b> <ul style="list-style-type: none"> <li>LCD HMI Russian Language strings fixed</li> </ul>
2.5.4	2.5.3	<b>Fixed Defect</b> <ul style="list-style-type: none"> <li>Fixed the energy data retention issue for energy data accumulated within 1 minute of an auxiliary power cycle</li> <li>Fixed issue of multi-tariff not working while being set to time of day from HMI</li> <li>PM55xx Cyber-security improvement</li> </ul>
2.5.3	2.5.2	<b>Fixed Defect</b> <ul style="list-style-type: none"> <li>Ethernet/IP changes in Identity object changed the product name to choose unique names for each model</li> <li>Ethernet/IP changes in link object. Changed the Attribute 11, to remove speed duplex pairs from Interface capability</li> </ul>
2.5.2	2.4.3	<b>New Features</b> <ul style="list-style-type: none"> <li>Added Ethernet/IP protocol support.</li> <li>Option in both webpages and HMI (Front Display) to Disable/Enable Ethernet/IP feature.</li> </ul> <b>Fixed Defect</b> <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>
2.4.3	2.4.2	<b>New Features</b> <ul style="list-style-type: none"> <li>Option in both webpages and HMI (Front Display) to Disable/Enable DPWS feature</li> </ul> <b>Fixed Defect</b> <ul style="list-style-type: none"> <li>None</li> </ul>
2.4.2	2.3.0	<b>New Features</b> <ul style="list-style-type: none"> <li>DPWS feature: Allows self-discovery of the meter when connected in Local Area Network</li> <li>Added MAC-ID display in HMI.</li> </ul> <b>Fixed Defect</b> <ul style="list-style-type: none"> <li>Corrected issue Power Factor not displaying *** when only auxiliary is given.</li> <li>Corrected issue Load Timer not working.</li> </ul>

		<ul style="list-style-type: none"> <li>• Watchdog Timer enabled in the PM556x</li> <li>• Webpage new user password not stored at first time: Fixed</li> </ul>
2.3.0	2.2.0	<p><b>New Features</b></p> <ul style="list-style-type: none"> <li>• Added BACnet/IP Functionality to the PM55xx meters.</li> </ul> <p><b>Fixed Defect</b></p> <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>
2.2.0	2.1.0	<p><b>QR Code Functionality</b></p> <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>
02.01.0000	02.00.0001	<p><b>New Features</b></p> <ul style="list-style-type: none"> <li>• Power Factor support <ul style="list-style-type: none"> <li>- Four (4) new registers were added (two Float32 and two INT16) to provide Power Factor in IEC and Lag/Lead format in the range of +1 to -1.</li> </ul> </li> </ul> <p><b>Fixed Defects</b></p> <ul style="list-style-type: none"> <li>• 1152 - Fixed WebPage: Password hash is only SHA-256 without *salt (SALT has been added).</li> <li>• 1290 - Digital input transitions now detected if the device powers up while input transitions are occurring.</li> <li>• 1318 - Fixed Maintenance Log: Web Page rollover issue.</li> <li>• 1526 - The PM5560 will “<b>no longer</b>” show a kW value when voltage and current values are zero, it will show a zero.</li> <li>• 1540 - MID meters running the new upgrade process will no longer upgrade web pages, and will present an appropriate error message instead.</li> <li>• 1554 - Corrected Semaphore Lost : In regards to Email on Alarm.</li> <li>• 1558 - Simultaneous reads/writes from external flash will no longer corrupt data.</li> <li>• 1564 - Fixed Datalog not wrapping around properly in circular mode.</li> <li>• 1557 - Removed entry showing the number of “<b>Active Connections</b>” from the Web Page.</li> <li>• 1569 - Corrected issue where the user is not notified of an upgrade failure.</li> <li>• 1578 - Will no longer get multiple entries in the maintenance log for a single time sync event.</li> </ul>
02.00.0001	01.01.0000	<p><b>New Features</b></p> <ul style="list-style-type: none"> <li>• Ethernet gateway functionality. <ul style="list-style-type: none"> <li>- With minimal configuration, the meter can act as an Ethernet gateway. This means that a Modbus master device can communicate using Ethernet through the meter to serial devices connected to the meter’s serial port. A Modbus TCP request is sent over the Ethernet to the gateway meter. The gateway meter uses Modbus RTU to forward the request to the downstream device addressed in the packet. When the downstream device responds, the gateway meter forwards the response back to the master.</li> </ul> </li> <li>• Simple Network Management Protocol (SNMP) support <ul style="list-style-type: none"> <li>- The meter can now communicate using SNMP, including SNMP traps. The meter comes preconfigured to communicate a wide range of power measurement parameters via SNMP after you enable SNMP on the meter and load the meter’s MIB file into your network management station.</li> </ul> </li> <li>• TCP/IP filtering <ul style="list-style-type: none"> <li>- The meter now has Modbus TCP/IP filtering. This feature lets you specify the Modbus rights for up to 10 unique IP addresses, plus the Modbus access rights for anonymous IP addresses.</li> </ul> </li> <li>• Updated PM5563 with optional remote display <ul style="list-style-type: none"> <li>- The PM5563 DIN-mount meter has been updated to support an optional remote display. Using the remote display provides the PM5563 with the same viewing and configuration functionality as meter models with an integrated display, allowing you to view data from and configure the PM5563 from a more accessible location.</li> <li>- <b>NOTE:</b> **You can only use the remote display with PM5563 meters that have the dedicated RJ-25 connection.</li> </ul> </li> <li>• Email on alarm <ul style="list-style-type: none"> <li>- The meter can now send an email or email-to-text message to up to three addresses when alarm conditions are detected. You can configure which alarm types and priorities trigger a message.</li> <li>- The message contains information about the alarm and the meter that triggered the alarm.</li> </ul> </li> </ul> <p><b>Fixed Defects</b></p> <ul style="list-style-type: none"> <li>• 1215 – Command 4002 resets meter when issued.</li> </ul>

		<ul style="list-style-type: none"> <li>• 1231 – DHCP device name was being truncated 1 character short causing DHCP IP address to randomly change.</li> <li>• 1254 – Etherbrick(IPCL) registers were unprotected from write access by customer.</li> <li>• 1280 – VLL Harmonics are improperly deadbanded when the total harmonic content was less than about 5V.</li> <li>• 1299 – The HTTP enable/disable screen always showed “Disabled” regardless of the current value.</li> <li>• 1416 – Meter displayed all 255(s) for IP address because of excessive modbus traffic.</li> <li>• 1452 – Modbus connection dropped when float32 value written to registers 64000 and above.</li> <li>• 1501 – Meter will start in a High state when switched to Energy mode for the digital output.</li> <li>• 1517 – Command 1012 returning msec instead of seconds.</li> <li>• 1521 – Wrong IP address was reported in QR code.</li> <li>• 1522 – Missing voltage values in the QR code for datalog.</li> <li>• 1530 – When attempting meter upgrade, the user can’t delete the App2.out file if accidentally copied to incorrect folder.</li> <li>• 1561 – Meter acquiring new DHCP address on power cycle.</li> <li>• 1564 – Data log on web page was not always wrapping around properly.</li> <li>• 1571 – DHCP device name was sometimes incorrect causing DHCP IP address to randomly change.</li> </ul> <p><b>Enhancements</b></p> <ul style="list-style-type: none"> <li>• New firmware upgrade method. <ul style="list-style-type: none"> <li>- There is a new method for upgrading the firmware on your meter and its Ethernet communications system. The new method simply uses FTP to copy files from your computer to the meter’s FTP server. The FTP server is accessed using the same login credentials as the meter webpages.</li> <li>- <b>NOTE:</b> This method replaces upgrading using DLF3000 software. After you upgrade your meter to 2.0.1 using the FTP method, you can no longer use DLF to perform meter upgrades.</li> </ul> </li> <li>• Redesigned and updated webpages <ul style="list-style-type: none"> <li>- The meter’s default webpages are updated to include more options to configure the meter, including many of the new features.</li> </ul> </li> <li>• Improved serial and TCP/IP communications.</li> <li>• Faster Modbus TCP/IP response times.</li> <li>• Faster web pages and better navigation.</li> <li>• Improved communications card general performance.</li> <li>• Enhanced DHCP performance on communications card.</li> <li>• Added additional communications card security.</li> <li>• Soft Reset Command resets the communications card as well as meter card.</li> </ul>
01.01.0000	01.00.0004	<p><b>New Features</b></p> <ul style="list-style-type: none"> <li>• Added Firmware to support the addition of a new LCD Display (Tianma Display)</li> <li>• Added QR Code feature to the PM5560 Product Line</li> <li>• Added Float32 Registers to the PM5560 to support both INT64 and Float32 Registers.</li> </ul> <p><b>Defects fixed</b></p> <ul style="list-style-type: none"> <li>• 1459 - Fix issue where on power, the Input Metering accumulation channels 2-4 were not being stored in NVram, only channel 1 was saved.</li> <li>• 1462 - Fix issue where on power, Input Metering registers 3574, 3578 and 3582 are all reset to ZERO while register 3570 holds the last value. Now with the fix all the registers would hold their values they contained before the power cycle.</li> </ul> <p><b>Enhancements</b></p> <ul style="list-style-type: none"> <li>• The meter now supports Float32 energy registers in conjunction with INT64 registers.</li> <li>• The meter now supports two types of LCD displays</li> <li>• Added QR Code functionality to the meter</li> </ul>
01.00.0003	01.00.0002	<p><b>Defects fixed</b></p> <ul style="list-style-type: none"> <li>• 1195 – Under voltage L-N alarm now has correct source</li> <li>• 1196 – Over Current Neut. and GND now log correct number of secondaries</li> <li>• 1201 – NV Ram no longer corrupted during power loss</li> <li>• 1203 – Custom alarms can now be ack. via command interface</li> <li>• 1204 – Custom alarms with data type INT64 are now handled correctly</li> <li>• 1206 – Data log now reports the correct timestamp when multiple records are read</li> </ul>



		<ul style="list-style-type: none"><li>1210 – Fixed energy pulse output inaccuracies at low pulse rates.</li></ul> <b>Enhancements</b> <ul style="list-style-type: none"><li>The system now correctly restores from backups in NOR flash memory, if corrupted data is detected in non volatile memory.</li><li>Extra phase information in OVUB, OVLL, OVTHD, UVLL and UVPHL alarms has been removed.</li><li>Fixed demand reset in rev sec mode checking of password.</li><li>Language version now shows on HMI before a language is selected.</li></ul>
01.00.0002	None	<ul style="list-style-type: none"><li>First Firmware release</li></ul>



NOTES:

Firmware version numbering system:  
xx.yy.tttt

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