SQUARE D COMPANY
Schneider Electric

PM800 Firmware Revision History

Summary of Production Releases for PM800

Release **Version**	Date	Reset System	Download System File Name	Operating System File Name
10.030	05/28/2003	10.000	PM8_DL_10_000.FW	PM8_OS_10_030.FW
10.040	06/05/2003	10.000	PM8_DL_10_000.FW	PM8_OS_10_040.FW
10.050	06/16/2003	10.000	PM8_DL_10_000.FW	PM8_OS_10_050.FW
10.060	07/16/2003	10.000	PM8_DL_10_000.FW	PM8_OS_10_060.FW
10.070	08/08/2003	10.000	PM8_DL_10_000.FW	PM8_OS_10_070.FW
10.080	09/12/03	10.000	PM8_DL_10_000.FW	PM8_OS_10_080.FW
10.200	11/17/03	10.000	PM8_DL_10_000.FW	PM8_OS_10_200.FW
10.210	11/21/03	10.000	PM8_DL_10_000.FW	PM8_OS_10_210.FW
10.220	12/16/03	10.000	PM8_DL_10_000.FW	PM8_OS_10_220.FW
10.300	06/ 07/04	10.000	PM8_DL_10_30.FW	PM8_OS_10_30FW
10.310	07/ 07/04	10.000	PM8_DL_10_30.FW	PM8_OS_10_310.FW
10.400	11/23/04	10.000	PM8_DL_10_410.FW	PM8_OS_10_400.FW
10.410	1/15/05	10.000	PM8_DL_10_410.FW	PM8_OS_10_410.FW
10.430	6/17/05	10.000	PM8_DL_10_410.FW	PM8_OS_10_430FW
10.520	03/31/06	10.000	PM8_DL_10_510.FW	PM8_OS_10_520FW
10.530	4/24/06	10.000	PM8_DL_10_510.FW	PM8_OS_10_530FW

Version Number	Description of Changes
10.030	• First public release
10.040	• Corrected error in Modbus communications with extremely fast turnaround time (PLC application)
10.050	• Corrected Modbus Driver to correct for communications system becoming non-responsive when a ‘break’ is received
10.060	• Corrected neutral to ground scaling error encountered when meter is installed in a floating system.
10.070	• Corrected error which inhibited the JBUS communications
10.080	• When using system type 30 or 31 with PTs in code with firmware versions 10.070 and below, incorrect voltage readings were reported (direct connect works correctly). Vca was reported correctly but the voltage reported for the other two phases would be high. This was due to an error in the voltage calculations for three-wire systems with PTs. Firmware version 10.080 corrects this problem.
10.200	• Added Auxiliary I/O Support • Enabled Local Discrete Input Pulse Metering • Added Active Load Timer (Operation Timer) • Added Power-Fail elapsed time recording • Added MODBUS ASCII protocol • Added Analog Input Alarms • Added six voltage THD Alarms • Added Display Bar-graph support • New setup menu structure • Added Real Energy In/Out Screen • Added Reactive Energy In/Out Screen • Added H1 Harmonics Screen • Added functionality to key press routine. If the display is idle (backlight off) the first button press will turn on the backlight but will not advance the display. • Changed functionality of “OK” menu selection so that if pressed on the last editable line of a screen it will perform a “Menu UP” • Removed RTC Error Enunciation of PM810 • Added the ability to inhibit the automatic saving of Present Min\Max values to Previous Min/Max values. (Default setting for PM810). • Added Demonstration Meter Test Mode Support
10.210	• Corrected continuous reset error in PM810. Error 20000001 in diagnostics screen.
10.220	• Modified firmware to enable the discrete input (S1) to ride through a soft reset without changing status. • Corrected firmware to report the correct status of outputs at start-up. • Added firmware to initialize the reference register number for analog outputs to 1100 during analog default initialization. • Range select for analog inputs and outputs is now set during a default I/O card initialization. • Changed Output code such that, when an output is in timed mode and has been energized by a command, and if a new command to energize the relay is issued before the timer expires, the timer is reset.
10.300	New Features: • EN50160 • PM850 Trending and Forecasting • Alarm Summary • Clock screen • PM810 support for logging module • German language Bug fixes: • Losing previous month in Min/Max system • Frequency showing incorrect decimal point in 400Hz system thru display • Summary screen showing incorrect energy suffix • Allow JBUS address above 247 to be setup thru display • Fix resets due to invalid bar graph range • Default date changed to 01/01/2000
10.310	Bug fixes: • Possible meter resets due to high rate of logging, increased meter watchdog and improved file throughput
10.400	New Features: • Remote communications port (Comm2) • Single Phase system types • Energy per Shift Bug fixes: • Fix alarm icon illuminating during “No priority” alarm • Fix display showing 400 Hz (previously showed 40.0 Hz).
10.410	Bug fix: • Energy registers are erased after a reset of a PM810. • Possible erroneous values in the energy registers for the PM810.
10.430	New Features: Support of new display vendor (internal needs only). Contrast control is not needed with the new display and is removed from the menu.
10.520	New Features: • Russian language support • Additional Min/Max Quantities (Vn-g, In) • Configurable Billing Log • Input Metering • Energy Per Shift Support for PM810 w/ Logging Module • Additional Standard Alarms (Over kW Total, Over kVA Total) • Floating Point Metering Registers • Disturbance Alarms (PM870) • WFC Capability up to 185 Cycles (PM870) • Single Phase PT configuration Modified Features: • Changed the duration of the timeout of a setup session from 2 minutes to 4 minutes

	• Change Self Test register 3050 to not latch bit when Meter Overrun occurs • Added code to allow user to configure sensitivity tolerance of frequency fluctuations (Frequency Sync Error Limit (reg 3237)) • Meter Init command redefined (command 10030); (Removed alarm disabling) • Set Factory Default command redefined (command 1130); (Removed setup of End of Incremental Energy Alarm, Changed Pwr Up Reset Alarm default priority from 0 to 3 • Change priority 0 alarms to not be logged into the alarm log. Bug Fixes: • Meter reset attributed to A/D lock up • Corrected Demand calculation • Corrected command 7110 & 7511 • Corrected Single Phase System CT/PT display screens • Corrected On-to-Off transition digital alarm when it is associated with a digital I/O point that is on slot B. • Corrected display “freeze” that occurs when a user selects a different Energy Display Precision value (reg 3215) than the default and the accumulated energy value is large enough to overflow which causes the first two lines of the display to freeze. • EN50160 corrections
10.530	Bug Fixes: • Corrected condition where a PM8 with an RDA attached will lock and hold metering values if a user switches between 232/485 mode via the mode button on the RDA • Corrected EN50160 Active Evaluation register (3910) where bit 5 was not set for the PM850

Firmware version numbering system:

- ❑ first 3 digits are feature release number
- ❑ 4th digit is maintenance release number
- ❑ last digit is working version number for factory use only

Note: PM810 is only available outside USA.