

PM5500 Series SE Driver for Power Monitoring Expert 2020 Release Notes

This document contains information about the Power Monitoring Expert 2020 SE (Standard Edition) driver for the PM5500 Series devices.

In this Document

Version History	3
Safety Information	4
Important information.....	4
Please note.....	4
Safety Precautions	5
Cybersecurity	6
Recommended Actions	6
PM5500 Series SE Driver	7
Power Monitoring Expert 2020 Requirements	7
Driver Version.....	7
Supported Models	8
Device License Type	9
Features	9
Implementation Details	11
Device Configuration and Upgrade	11
Digital Output Operation.....	11
Alarm Configuration.....	12
Alarm Log	12
Maintenance Log.....	12
On-Board Logging	13
Waveform Log	14
PC-based Logging.....	15
Setting Device Demand Password.....	18

Known Issues	20
Vista Factory Diagrams	21
Additional Information	
<ul style="list-style-type: none">• PM5500 device documentation• Power Monitoring Expert 2020 documentation	

Version History

The following table lists the version history of the PM5500 Series SE Driver for Power Monitoring Expert 2020:

Version Number	Description of changes:
2020.20134.03	Enhancements: <ol style="list-style-type: none">1. Variant support for 5565, 5570,5580, 5593,5650, 5655,5660,57602. Analog Inputs3. RCM Inputs4. Waveform Capture5. Sag/Swell Detection
Native in PME 2020	

Safety Information

Important information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Please note

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

Safety Precautions

During installation or use of this software, pay attention to all safety messages that occur in the software and that are included in the documentation. The following safety messages apply to this software in its entirety.

▲ WARNING

UNINTENDED EQUIPMENT OPERATION

- Do not use the software for critical control or protection applications where human or equipment safety relies on the operation of the control action.
- Do not use the software to control time-critical functions because communication delays can occur between the time a control is initiated and when that action is applied.
- Do not use the software to control remote equipment without securing it with an authorized access level, and without including a status object to provide feedback about the status of the control operation.

Failure to follow these instructions can result in death or serious injury.

▲ WARNING

INACCURATE DATA RESULTS

- Do not incorrectly configure the software, as this can lead to inaccurate reports and/or data results.
- Do not base your maintenance or service actions solely on messages and information displayed by the software.
- Do not rely solely on software messages and reports to determine if the system is functioning correctly or meeting all applicable standards and requirements.
- Consider the implications of unanticipated transmission delays or failures of communications links.

Failure to follow these instructions can result in death, serious injury, equipment damage, or permanent loss of data.

Cybersecurity

This section includes information on how to help secure your system.

⚠ WARNING

POTENTIAL COMPROMISE OF SYSTEM AVAILABILITY, INTEGRITY, AND CONFIDENTIALITY

Use cybersecurity best practices to help prevent unauthorized access to the software.

Failure to follow these instructions can result in death, serious injury, equipment damage, or permanent loss of data.

Work with facility IT system Administrator to ensure that the system adheres to the site-specific cybersecurity policies.

Recommended Actions

- Always inspect the digital signature by Right click and view Digital signature on the installer exe before installing a driver.

The name of the signer should be Schneider Electric.

PM5500 Series SE Driver

Power Monitoring Expert 2020 Requirements

The device can be connected to Power Monitoring Expert 2020 using one of the following methods:

- As a translating gateway, such as an EGX300 or some other method of connection that allows the device to use Modbus™ TCP.
- As a serial connection using a suitable RS-485 to RS-232 converter.
- As an Ethernet device (for potential issues, refer to the *Known Issues* section).

Driver Version

This release note applies to the device driver version 2020.20134.03.

Supported Models

The driver supports the following device variants belonging to the PM5500 Series:

Model Name	Firmware version
PM5560 PM5561, PM5562, PM5563	2.4.3
PM5565, PM5570, PM5580, PM5650, PM5660, PM5661, PM5760	3.1.1

New Feature / Affected Change	Existing Variants			New Variants									
	PM5560	PM5561	PM5563	PM5565	PM5570	PM5580	PM5585	PM5593	PM5655	PM5660	PM5650	PM5661	PM5760
DNP3 over Ethernet	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Digital Inputs (existing)	4	4	4	4	2	4	4	4	4	2	4	2	2
Analog Inputs (4-20mA)	-	-	-	-	2	-	-	-	-	-	-	-	-
24VDC Control Power	-	-	-	-	-	Yes	Yes	-	-	-	-	-	-
RCM Inputs	-	-	-	-	-	-	-	-	-	2	-	2	2
Sag/Swell Detection	-	-	-	-	-	-	-	-	Yes	-	Yes	-	Yes
Waveform capture	-	-	-	-	-	-	-	-	Yes	-	Yes	-	Yes

NOTE: Upgrade to firmware version 2.4.3 or greater if you are using V1.x.xxxx.
For more details, refer to the *Known Issues* section.

Some features may not work for other firmware versions.

Device License Type

- PM5500 series device type consumes DL-M type license.
 - Device variants supported are
PM5560,5561,5562,5563,5660,5570,5580,5565, 5593, 5585.
- PM5500 PQ device type consumes DL-S type license.
 - Device variants supported are PM5650,5760,5655.

Features

This device driver supports the following features:

- Support for all real-time registers
- Factory diagrams for Wye, Delta and Single phase connections
- Automatic synchronization of device clock with UTC at hourly intervals
- Input metering
- Reset operations
- Support for on-board data logs
- Support for on-board alarm logs
- Support for on-board maintenance logs
- Support for Digital Output operations
- Support for onboard waveform Logs
- Support for Sag/Swell Detection
- Support for real-time data transfer using OPC
- Support for real-time data transfer using EWS

The following are the factory-provided default reports in the Web-based Reports application:

- Energy Cost
- Event History
- Energy Period Over Period
- Energy Usage by Shift
- Hourly Usage
- Load profile

- Multi Device Usage
- Single Device Usage
- Tabular
- Trend
- PQ Reports

Implementation Details

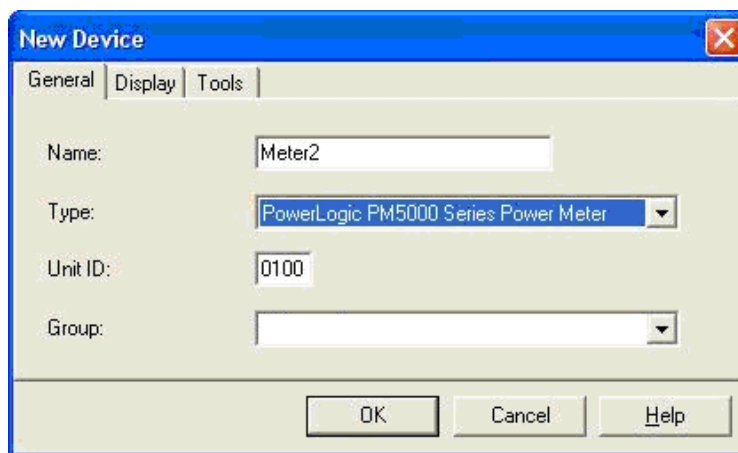
Device Configuration and Upgrade

NOTE: Power Monitoring Expert 2020 cannot be used to configure this device or to upgrade the device firmware.

The device firmware can be upgraded using the DLF 3000 tool.

The device configuration can be performed using ION Setup V3.0 and later. In ION Setup, open the **New Device** screen and configure the device as follows:

On the **General** tab, in the **Type** list, click **PowerLogic PM5000 Series Power Meter**.



Digital Output Operation

⚠ WARNING

UNINTENDED EQUIPMENT OPERATION

- Do not use control objects for time-critical functions because delays can occur between the time a control action is initiated and when that action is applied.
- Do not create a custom control object in a Vista diagram for remote equipment operation without configuring it with the appropriate access level, and without configuring a status object to indicate the status of the control operation.

Failure to follow these instructions can result in death or serious injury.

The PM5500 Series device provides 2 digital outputs which can be operated remotely using the Power Monitoring Expert 2020. To operate the digital outputs, create a custom Vista diagram with the necessary control objects and status objects.

NOTE:

- Be aware that the time to complete an I/O command operation depends on many factors, most notably network traffic. Under normal network traffic conditions, it takes approximately 10 seconds to complete the command sequence. In case of heavy network traffic, the command sequence may take longer to complete.
 - It is important to realize that system control paths contain communications links that may have unanticipated transmission delays or failures.
-

Alarm Configuration

Configuration of alarms is possible from Vista. However, Vista might take longer than expected (at times up to 30 seconds) to refresh after configuring an item. You should wait for Vista to refresh before proceeding to configure the next item.

In the case of Under Alarms, configure dropout set points before pickup set points. Otherwise, the alarm set point values will not get configured. Similarly, if invalid values are entered, the device will not get configured. For more information on valid ranges for set point values, refer to the Device user manual.

NOTE:

- Vista can only be used for alarm configuration of standard, unary, sag/swell and digital alarm type. All other device configuration must be performed using ION Setup.
 - Alarm configuration is also possible using ION Setup.
-

Alarm Log

The PM5500 Series supports on-board alarm logging. The device driver polls the device and checks for new log entries at regular intervals. The default polling interval is 30 seconds.

The polling interval can be modified by changing the value of the register "EL1 Poll Period Seconds" in ext_pm5500.ion in the ...\\system\\translators folder. The lowest possible polling interval is 5 seconds.

Maintenance Log

The PM5500 Series supports on-board maintenance logging. The device driver polls the device and checks for new log entries at regular intervals. The default polling interval is 600 seconds.

The polling interval can be modified by changing the value of the register "EL3 Poll Period Seconds" in ext_pm5500.ion in the ...\\system\\translators folder. The lowest possible polling interval is 5 seconds.

On-Board Logging

The PM5500 Series supports on-board logging for up to 14 user-selectable measurements.

The device driver shall poll the device and check for new log entries at regular intervals. The default polling interval is 30 seconds.

The polling interval can be modified by changing the value of the register "R3 Poll Period Seconds" in ext_pm5500.ion in the ...\\system\\translators folder. The lowest possible polling interval is 5 seconds.

The measurements available for selection are as follows:

Measurements	Preconfigured as factory default
Real Energy Into the Load	✓
Real Energy Out of the Load	-
Reactive Energy Into the Load	✓
Reactive Energy Out of the Load	-
Apparent Energy Into the Load	-
Apparent Energy Out of the Load	-
Digital Input 01 Count	-
Digital Input 02 Count	-
Digital Input 03 Count	-
Digital Input 04 Count	-
WAGES External Input 1 Cumulative Usage	-
WAGES External Input 2 Cumulative Usage	-
WAGES External Input 3 Cumulative Usage	-
WAGES External Input 4 Cumulative Usage	-
Current A	-
Current B	-
Current C	-
Current N	-
Current G	-
Current Avg	-
Voltage A-B	-
Voltage B-C	-
Voltage C-A	-
Voltage L-L Avg	-
Voltage A-N	-
Voltage B-N	-
Voltage C-N	-
Real Power A	-
Real Power B	-

Measurements	Preconfigured as factory default
Real Power C	-
Real Power Total	-
Reactive Power A	-
Reactive Power B	-
Reactive Power C	-
Reactive Power Total	-
Apparent Power A	-
Apparent Power B	-
Apparent Power C	-
Apparent Power Total	-
Residual Current I5	-
Residual Current I6	-
Analog Input 1 scaled value	-
Analog Input 2 scaled values	-

For more information on on-board logging feature, refer to the device documentation.

Waveform Log

The driver supports waveforms captured by the device. The device driver polls the device and checks for new log entries at regular intervals. The default polling interval is 30 seconds.

To modify the polling interval, copy the pm5500_pq.ion file from the system \ translators folder to the config \ translators folder. Change the value of the register "WR Poll period" in the pm5500_pq.ion file in the config \ translators folder.

The driver downloads the waveforms of the below measurements:

- Voltage A-N
- Voltage B-N
- Voltage C-N
- Voltage A-B
- Voltage B-C
- Voltage C-A
- Current A
- Current B
- Current C

The entire process of capturing the waveforms can take within 1 to 5 minutes to complete. While capturing waveform, if the driver encounters any issue like exception response from device, or sees error flag set etc., it will log the issue in Diagnostic log of PME.

PC-based Logging

The PM5500 Series device driver allows the user to log data using the PC-based logging feature.

The following measurements are logged by default using the PC-based logging feature:

Measurements	Logging Interval (in seconds)
Current Phase A	900
Current Phase B	900
Current Phase C	900
Current Phase Avg	900
Demand Real Power A	900
Demand Real Power B	900
Demand Real Power C	900
Demand Real Power Total	900
Demand Reactive Power Total	900
Demand Apparent Power Total	900
Demand Current A	900
Demand Current B	900
Demand Current C	900
Demand Current Avg	900
Voltage A-B	900
Voltage B-C	900
Voltage C-A	900
Voltage L-L Avg	900
Voltage A-N	900
Voltage B-N	900
Voltage C-N	900
Voltage L-N Avg	900
Power Factor Total	900
WAGES External Input 1 Demand Last	900
WAGES External Input 2 Demand Last	900
WAGES External Input 3 Demand Last	900
WAGES External Input 4 Demand Last	900
WAGES External Input 1 Cumulative Usage	900
WAGES External Input 2 Cumulative Usage	900
WAGES External Input 3 Cumulative Usage	900
WAGES External Input 4 Cumulative Usage	900

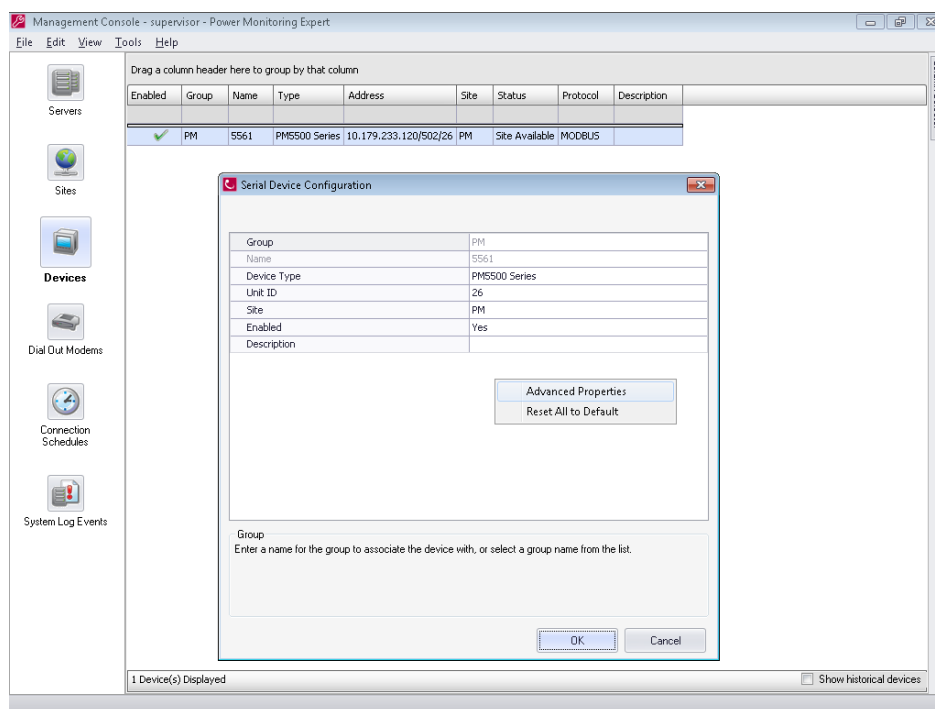
To change the list of measurements being logged, use the Device Type Editor, accessed from the **Tools > System** menu in Management Console.

Time Synchronization Enable/Disable

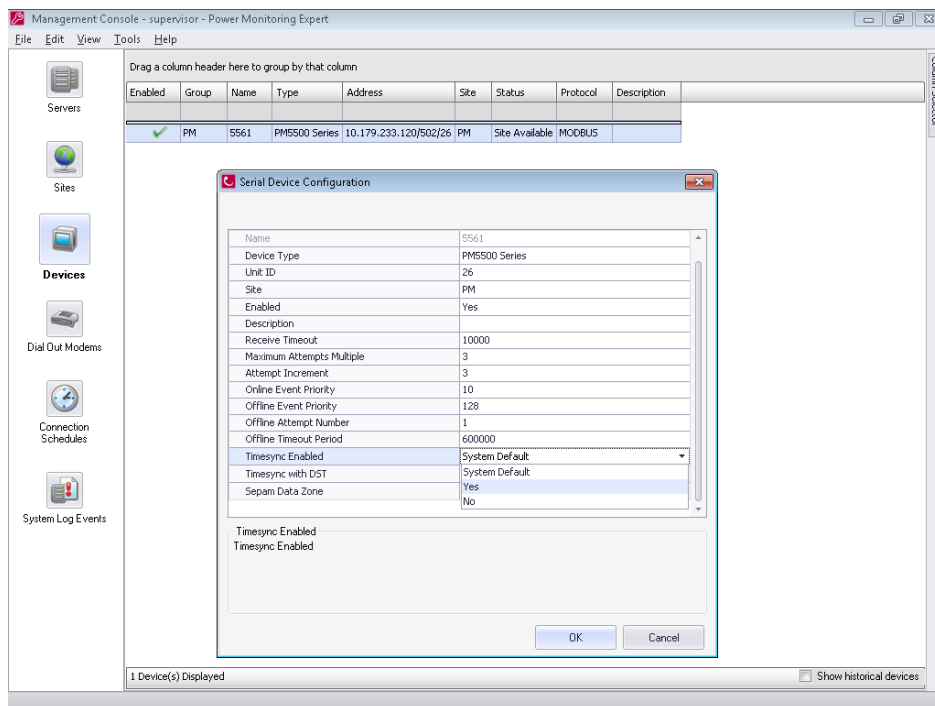
By default, the Power Monitoring Expert 2020 server synchronizes the device time with UTC at hourly intervals.

For a particular device instance, disable time synchronization through Management Console as follows:

1. Click the **Devices** icon, right-click the device instance and select the **Configure Device** option.
2. Right-click the grid area and select the **Advanced Properties** menu option.



3. To enable the Timesync, select **Yes** from the **Timesync Enabled** drop-down list. To disable **Timesync**, select **No** from the **Timesync Enabled** drop-down list.



Time synchronization interval can be modified by changing the **TimeSyncInterval** attribute in the pm5500.xml map file, which determines the time synchronization interval in seconds.

To disable the time synchronization for the entire device type, set the **TimeSyncInterval** attribute in pm5500.xml file to **0**.

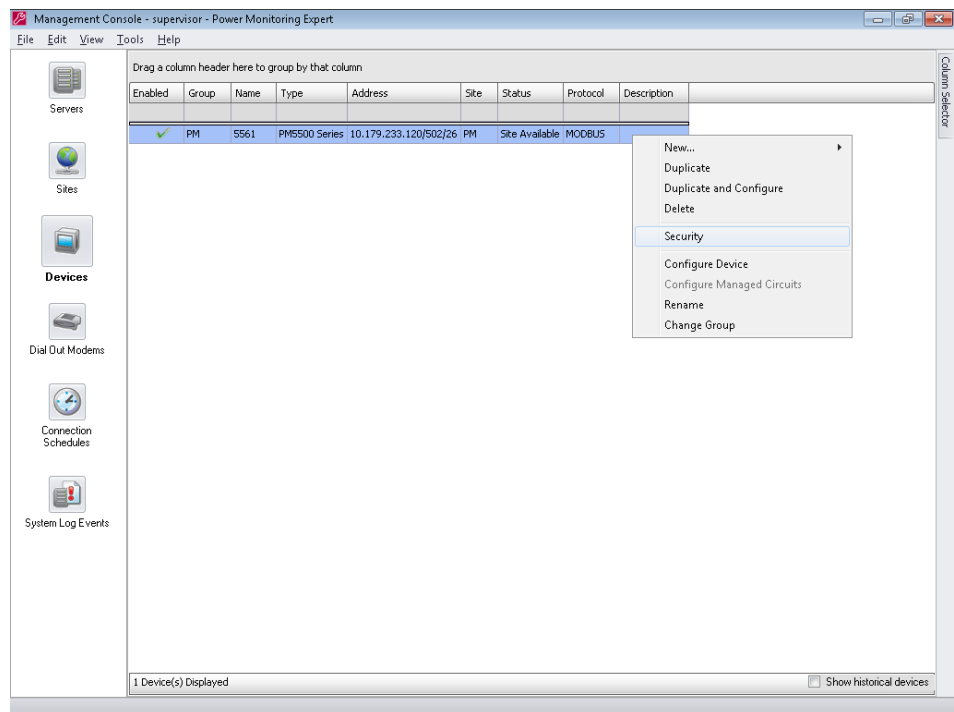
NOTE: The minimum value for the **TimeSyncInterval** attribute is 300 seconds. The **TimeSyncInterval** attribute takes effect only if **Timesync Enabled** is set to **System Default**. The time synchronization occurs at fixed hourly intervals if **Timesync Enabled** is set to **Yes**.

Setting Device Demand Password

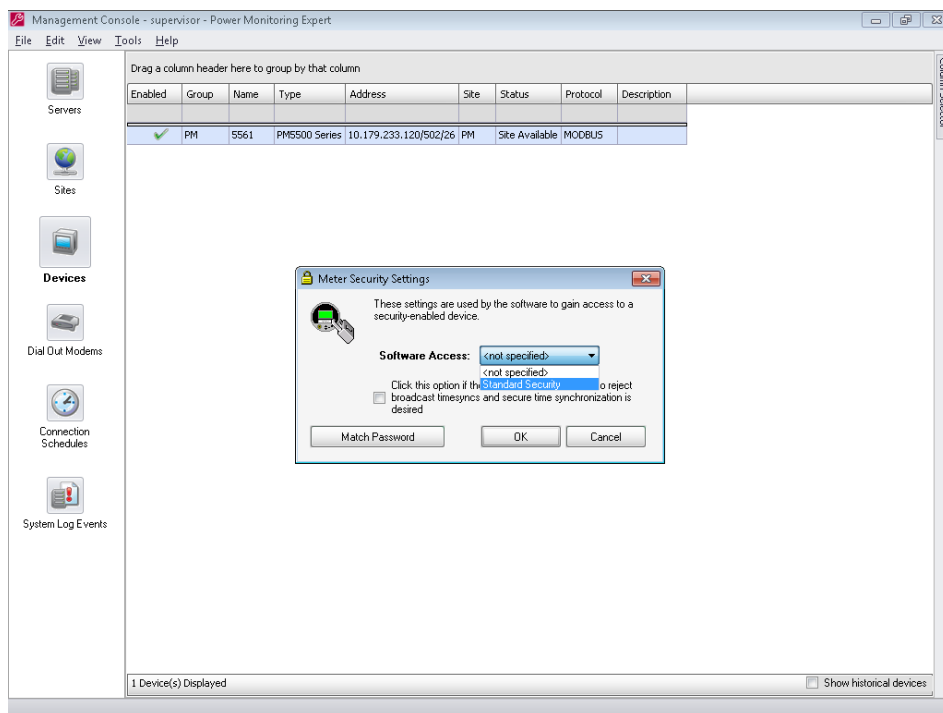
When revenue security is enabled, the Demand Reset functionality of the PM5000 Series devices are protected by a password, that is, Demand password.

For successful reset operation, the demand password in the device should match the password in the Power Monitoring Expert 2020. If the demand password is changed in the device, ensure that the same is updated in the Power Monitoring Expert 2020 through Management Console as follows:

1. Go to **Devices** icon, right-click the device instance to open **Security** property.

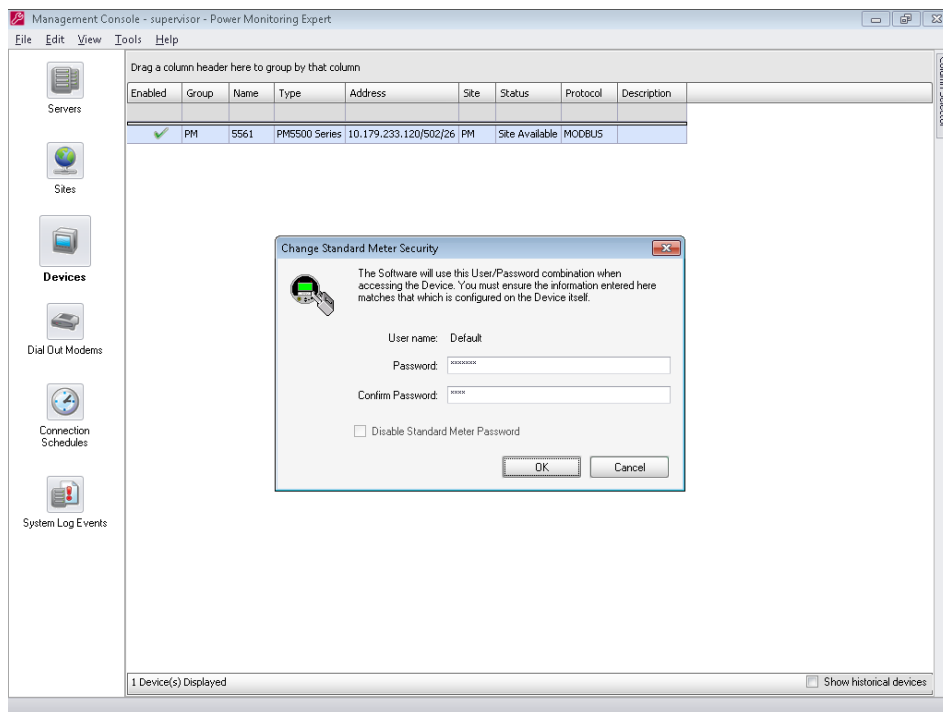


2. Select the **Standard Security** option from the **Software Access** dropdown list.



3. Click **OK** to set the new device password.

NOTE: The new password should be in numerical format, containing four digits.



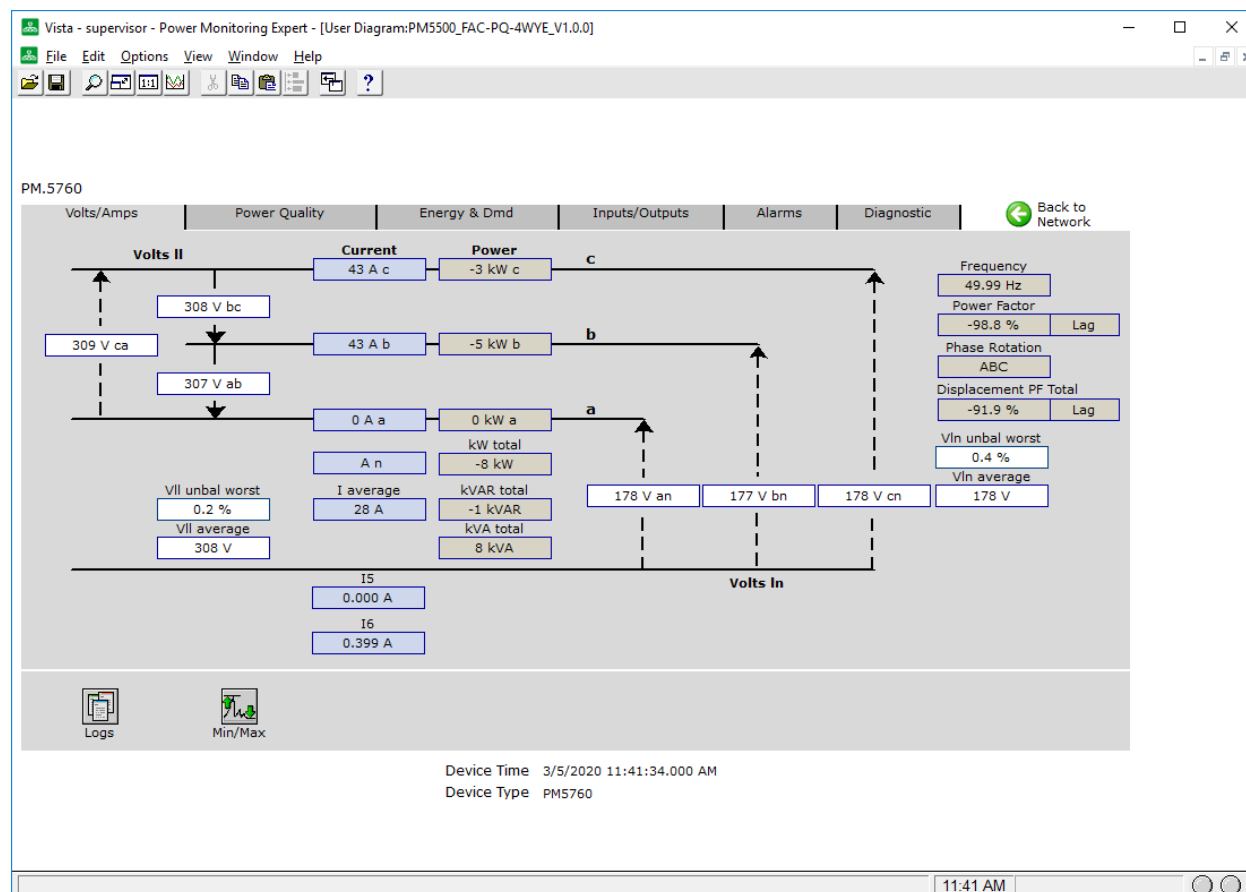
Known Issues

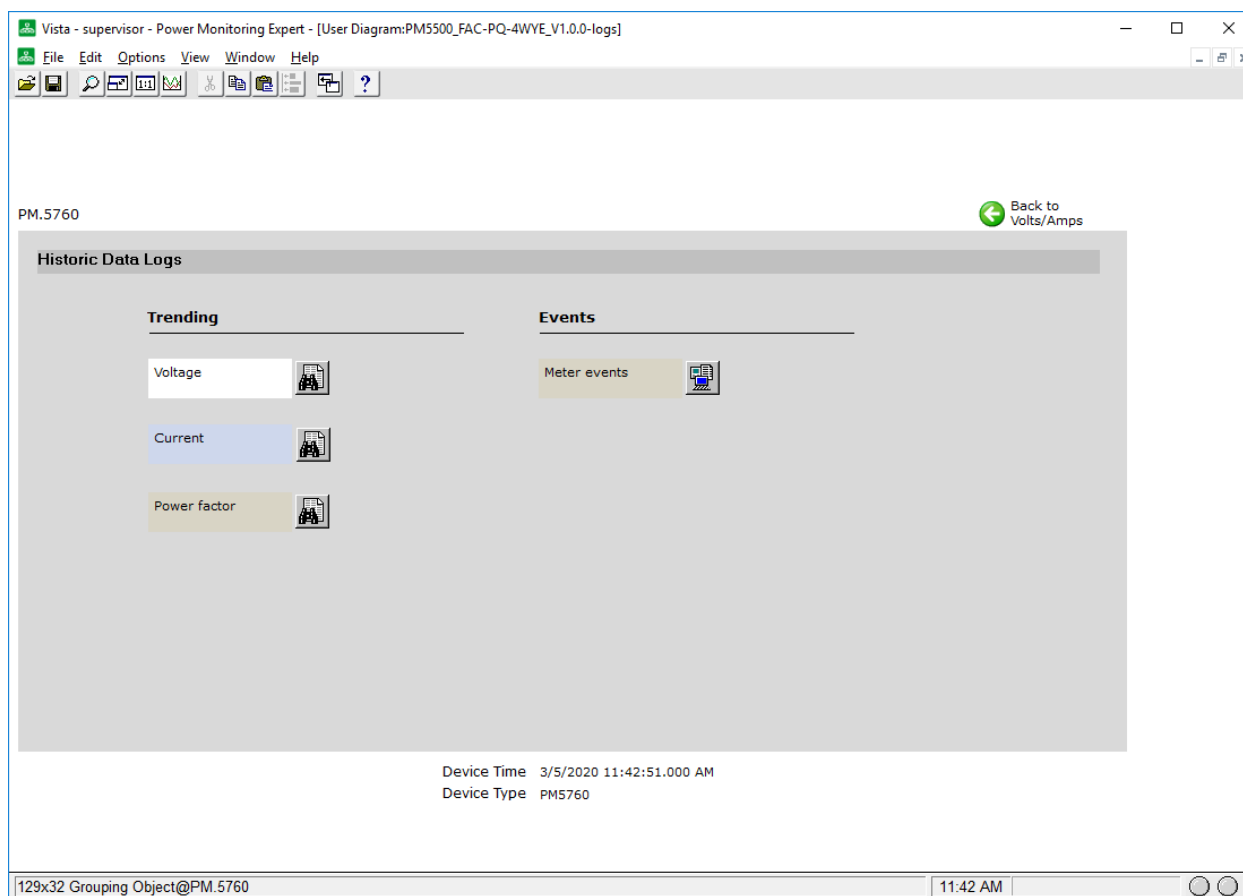
Following are the known issues as of the publication date of this document. These issues might be resolved in future releases:

- Time synchronization cannot be disabled on a device instance basis, if the device is connected as an Ethernet Device.
Workaround: Configure the device as a Serial Device on the Ethernet Gateway site.
- The driver skips record(s) when an exception response is received from the device while reading it. This means there may be occasional gaps in the data log read from the device. Frequency of such gaps depends on the device behaviour. An entry is made in the PME system event log (in Management Console) every time PME driver skips a record. (along with the record number being skipped)

Vista Factory Diagrams

This section contains samples of the Vista factory diagrams for the device.





Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-minmax]

File Edit Options View Window Help

PM.5760

Min/Max Voltage Min/Max Current Min/Max

Back to Volts/Amps

Min		Max	
	Value		Value
kW total	-20.055 kW	kW total	0.072 kW
kVAR total	-13.336 kVAR	kVAR total	12.482 kVAR
kVA total	0.054 kVA	kVA total	21.771 kVA
Frequency	49.91 Hz	Frequency	50.13 Hz
PF Total	-52 %	PF Total	86 %
PF Total Load Type	Lead	PF Total Load Type	Lead
Displacement PF Total	0 %	Displacement PF Total	0 %
Displacement PF Total Load Type	Lead	Displacement PF Total Load Type	Lead
Total Demand Distortion	0.099 %	Total Demand Distortion	19,152.277 %

Reset Min/Max
(also resets harmonics min/max)

Device Time 3/5/2020 11:43:40.000 AM
Device Type PM5760

11:43 AM


Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-minmaxv]

File Edit Options View Window Help

PM.5760

Min/Max Voltage Min/Max Current Min/Max [Back to Volts/Amps](#)

Min		Max	
	Value		Value
Vab	196 V	Vab	411 V
Vbc	175 V	Vbc	328 V
Vca	196 V	Vca	329 V
Van	114 V	Van	238 V
Vbn	113 V	Vbn	237 V
Vcn	47 V	Vcn	189 V
Vll Unbal worst	0.0 %	Vll Unbal worst	33.8 %
Vln Unbal worst	0.1 %	Vln Unbal worst	70.3 %
Vll avg	196 V	Vll avg	328 V
Vln avg	113 V	Vln avg	189 V

Reset Min/Max
(also resets harmonics min/max) 

Device Time 3/5/2020 11:44:08.000 AM
Device Type PM5760

11:44 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-minmax]

File Edit Options View Window Help

PM.5760

Min/Max Voltage Min/Max Current Min/Max

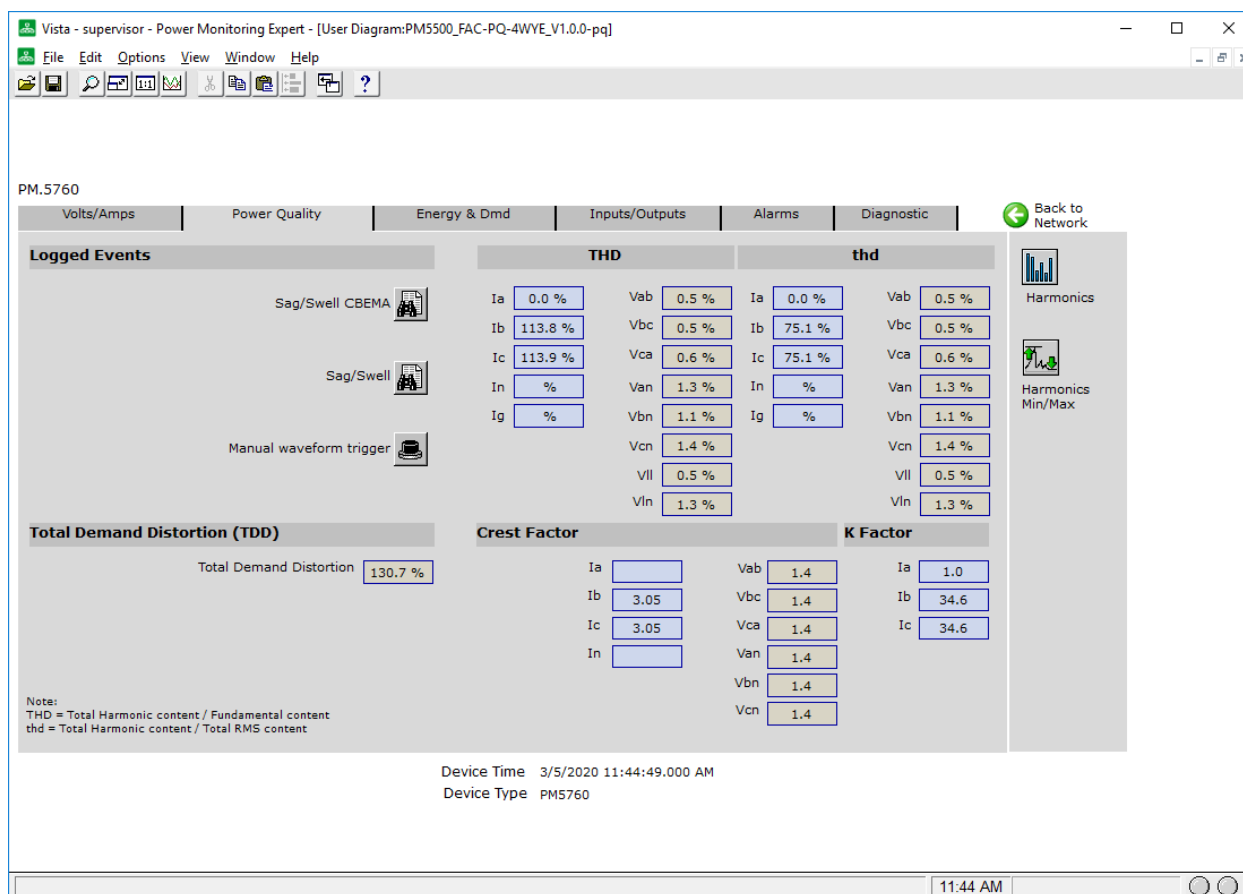
Back to Volts/Amps

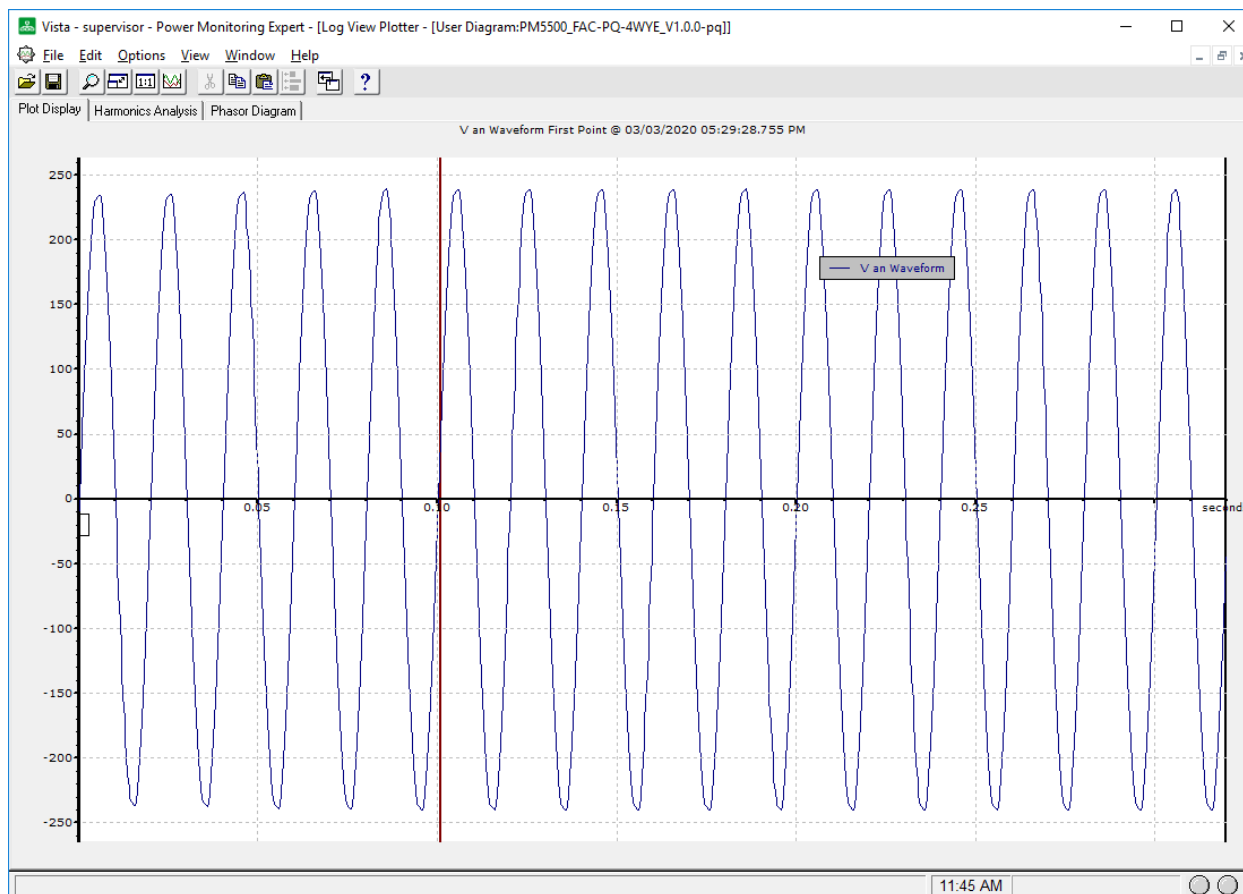
Min		Max	
	Value		Value
Ia	0.00 A	Ia	0.00 A
Ib	0.35 A	Ib	71.24 A
Ic	0.35 A	Ic	71.24 A
In	A	In	A
Ig	A	Ig	A
I avg	0.24 A	I avg	47.49 A
I Unbal worst	100.0 %	I Unbal worst	100.0 %

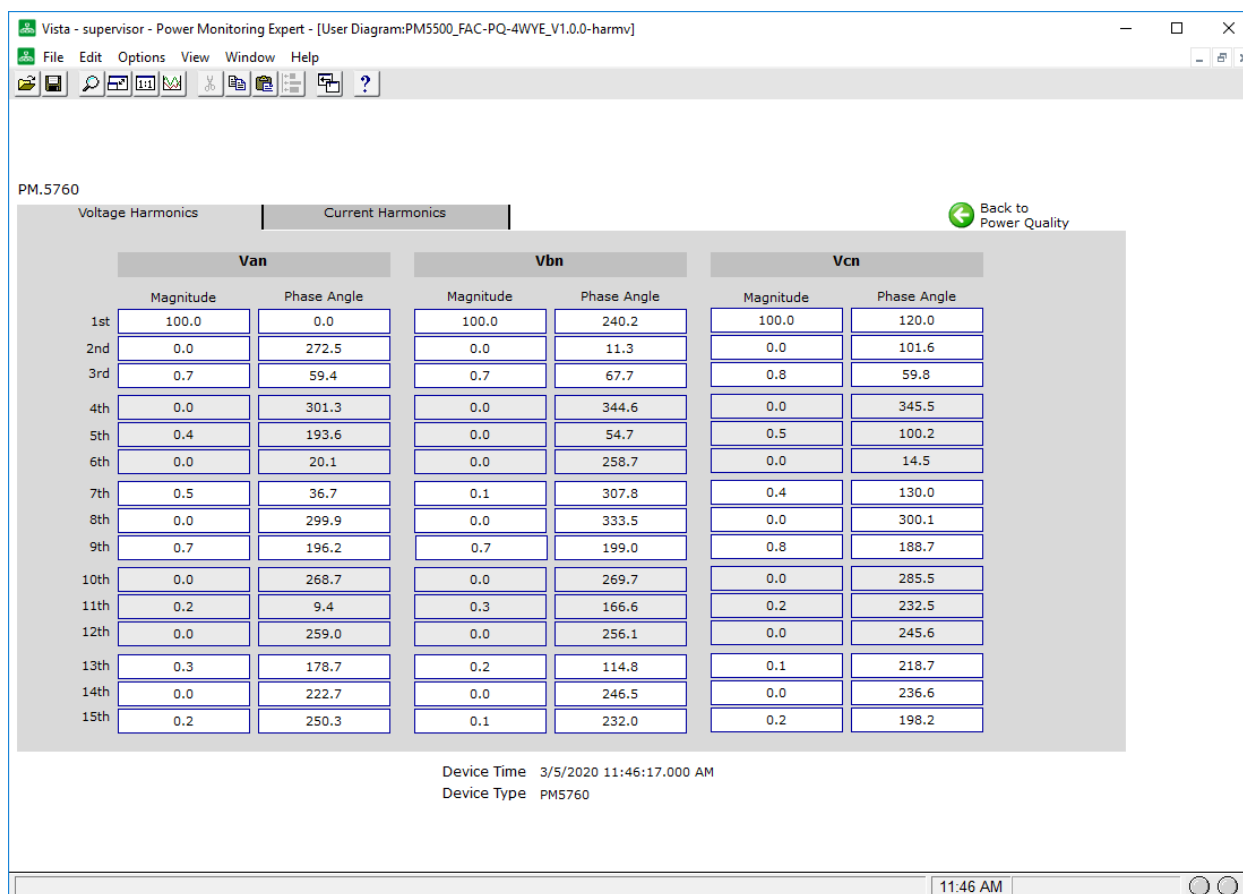
Reset Min/Max
(also resets harmonics min/max)

Device Time 3/5/2020 11:44:27.000 AM
Device Type PM5760

11:44 AM







Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-harmc]

File Edit Options View Window Help

PM.5760

Voltage Harmonics | **Current Harmonics** | [Back to Power Quality](#)

	Ia		Ib		Ic	
	Magnitude	Phase Angle	Magnitude	Phase Angle	Magnitude	Phase Angle
1st	inf	307.5	100.0	67.8	100.0	247.8
2nd	inf	227.0	15.1	78.7	15.1	258.8
3rd	inf	170.9	80.4	19.6	80.4	199.6
4th	inf	165.3	15.0	66.6	15.0	246.6
5th	inf	210.7	50.7	337.9	50.7	157.9
6th	inf	207.3	14.8	54.3	14.8	234.3
7th	inf	164.0	24.7	313.9	24.7	133.8
8th	inf	208.0	14.4	42.1	14.4	222.1
9th	inf	116.4	16.0	318.4	16.0	138.4
10th	inf	164.0	13.9	30.0	14.0	210.0
11th	inf	97.9	14.6	304.5	14.5	124.5
12th	inf	67.6	13.4	18.0	13.4	197.9
13th	inf	323.1	9.5	280.9	9.5	101.0
14th	inf	111.0	12.8	5.9	12.8	185.9
15th	inf	108.5	5.2	279.6	5.2	99.6

Device Time 3/5/2020 11:46:40.000 AM
Device Type PM5760

11:46 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-harminmaxv]

File Edit Options View Window Help

PM.5760

Voltage Harmonics | **Current Harmonics**

[Back to Power Quality](#)

Min Total Harmonic Distortion (THD)		Min Total Harmonic Distortion (thd)	
Vab	0.3 %	Vab	0.3 %
Vbc	0.3 %	Vbc	0.3 %
Vca	0.4 %	Vca	0.4 %
Van	0.8 %	Van	0.8 %
Vbn	0.6 %	Vbn	0.6 %
Vcn	0.0 %	Vcn	0.0 %
Vll	0.3 %	Vll	0.3 %
Vln	0.8 %	Vln	0.8 %

Max Total Harmonic Distortion (THD)		Max Total Harmonic Distortion (thd)	
Vab	11.5 %	Vab	19,152.3 %
Vbc	10.2 %	Vbc	10.2 %
Vca	20.0 %	Vca	19.6 %
Van	14.3 %	Van	14.1 %
Vbn	14.1 %	Vbn	13.9 %
Vcn	25.8 %	Vcn	25.0 %
Vll	9.3 %	Vll	9.2 %
Vln	12.0 %	Vln	11.7 %

Reset Harmonics Min/Max
(also resets volts/amps min/max)

Device Time 3/5/2020 11:47:24.000 AM
Device Type PM5760

11:47 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-harminmaxc]

File Edit Options View Window Help

PM.5760

Voltage Harmonics | **Current Harmonics** Back to Power Quality

Min Total Harmonic Distortion (THD)		Min Total Harmonic Distortion (thd)	
Ia	0.0 %	Ia	0.0 %
Ib	0.0 %	Ib	0.0 %
Ic	0.0 %	Ic	0.0 %
In	%	In	%
Ig	%	Ig	%

Max Total Harmonic Distortion (THD)		Max Total Harmonic Distortion (thd)	
Ia	0.0 %	Ia	0.0 %
Ib	1,000.0 %	Ib	99.9 %
Ic	295.2 %	Ic	94.7 %
In	%	In	%
Ig	%	Ig	%

Reset Harmonics Min/Max
(also resets volts/amps min/max)

Device Time 3/5/2020 11:47:46.000 AM
Device Type PM5760

11:47 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-rev]

File Edit Options View Window Help

PM.5760

Volts/Amps Power Quality Energy & Dmd Inputs/Outputs Alarms Diagnostic Back to Network

Demand

	Interval	Present	Predicted
kW	-8	-8	-8
kVAR	-1	-1	-1
kVA	8	8	8
Iavg	28	28	28

Reset All Dmd Interval

Demand Log

Peak Demand

kW	-13	2/27/2020 11:53:16.000 AM
kVAR	2	3/3/2020 03:37:23.000 PM
kVA	13	2/27/2020 11:53:16.000 AM
Iavg	35	2/27/2020 11:53:16.000 AM

Reset Peak Power Dmd

Reset Peak Current Dmd

Energy

	kWh	kVARh	kVAh
imp	5.947	14.193	12.451
exp	1,735.431	266.180	1,756.819
net	-1,729.484	-251.987	-1,744.368
total	1,741.378	280.373	1,769.270

Reset Accum Energies

Energy log

Multi Tariff

Device Time 3/5/2020 11:48:58.000 AM
Device Type PM5760

11:49 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-tou-s-d]

File Edit Options View Window Help

PM.5760


Back to Energy & Dmd

Multi Tariff - Delivered

	Rate A	Rate B	Rate C	Rate D
Active Energy [kWh]	0	0	0	0
Reactive Energy [kVARh]	0	0	0	0
Apparent Energy [kVAh]	0	0	0	0

	Rate E	Rate F	Rate G	Rate H
Active Energy [kWh]	0	0	0	0
Reactive Energy [kVARh]	0	0	0	0
Apparent Energy [kVAh]	0	0	0	0

Multi Tariff Active Rate

Reset Multi Tariff 

Device Time 3/5/2020 11:49:55.000 AM
Device Type PM5760

11:49 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-dio]

File Edit Options View Window Help

PM.5760

Volts/Amps Power Quality Energy & Dmd Inputs/Outputs Alarms Diagnostic

Back to Network

Digital I/O

Inputs

Source	Counter Reset	Status	Count	Control Mode
Digital Input S1		Off	0	Alarm
Digital Input S2		Off	1	Alarm

Outputs

Source	Counter Reset	Status	Count	Operating Mode	Control Mode	Behavioral Mode
Digital Output D1		Off	86	Normal	External	Normal
Digital Output D2		Off	178	Normal	External	Normal

Input Metering

Device Time 3/5/2020 11:50:34.000 AM
Device Type PM5760

11:50 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-inptmtr]

File Edit Options View Window Help

PM.5760

Back to Inputs/Outputs

Input Metering

Digital Input Association

Source	Pulse Weight	Digital Input Assoc
InpMtr Chan 1	0	0
InpMtr Chan 2	0	0

Demand

Source	Present	Last	Max	Max occurred at	Units
InpMtr Chan 1	0	0	0	2/7/2020 11:36:55.000 AM	No Units
InpMtr Chan 2	0	0	0	2/7/2020 11:36:55.000 AM	No Units
	0	0	0	2/7/2020 11:36:55.000 AM	
	0	0	0	2/7/2020 11:36:55.000 AM	No Units

Cumulative Usage

Source	Usage	Units
InpMtr Chan 1	0	No Units
InpMtr Chan 2	0	No Units
	0	
	0	

Reset Peak Demand InpMtr

Reset Accum InpMtr

InpMtr Log

Device Time 3/5/2020 11:51:07.000 AM
Device Type PM5760

11:51 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-sp]

File Edit Options View Window Help

PM.5760

Volts/Amps			Power Quality			Energy & Dmd			Inputs/Outputs			Alarms			Diagnostic		
Source	Enabled	Status	Source	Enabled	Status	Source	Enabled	Status	Source	Enabled	Status	Source	Enabled	Status	Source	Enabled	Status
Over Current, Phase	No	Inactive	Phase Loss	No	Inactive	Over Residual Current 15 - Alarm 01	No	Inactive	Over Residual Current 15 - Alarm 02	No	Inactive	Over Residual Current 16 - Alarm 01	Yes	Inactive	Over Residual Current 16 - Alarm 02	Yes	Inactive
Under Current, Phase	No	Inactive	Meter Power Up	Yes	Active	Meter Reset	Yes	Active	Meter Diagnostic	Yes	Inactive	Phase Reversal	No	Inactive	Digital Alarm D11	No	Inactive
Over Current, Neutral	No	Inactive	Phase Reversal	No	Inactive	Digital Alarm D11	No	Inactive	Digital Alarm D12	Yes	Inactive	Digital Alarm D13			Digital Alarm D14		
Over Current, Earth	No	Inactive	Digital Alarm D12	Yes	Inactive	Digital Alarm D13			Digital Alarm D14			Custom Alarm 01	No	Inactive	Custom Alarm 02	No	Inactive
Over Voltage, L-L	No	Inactive	Custom Alarm 01	No	Inactive	Custom Alarm 02	No	Inactive	Custom Alarm 03	No	Inactive	Custom Alarm 04	No	Inactive	Custom Alarm 05	No	Inactive
Under Voltage, L-L	No	Inactive	Custom Alarm 02	No	Inactive	Custom Alarm 03	No	Inactive	Custom Alarm 04	No	Inactive	Custom Alarm 05	No	Inactive	Logic Alarm 1	No	Inactive
Over Voltage, L-N	No	Inactive	Custom Alarm 03	No	Inactive	Custom Alarm 04	No	Inactive	Custom Alarm 05	No	Inactive	Logic Alarm 2	No	Inactive	Logic Alarm 3	No	Inactive
Under Voltage, L-N	No	Inactive	Custom Alarm 04	No	Inactive	Custom Alarm 05	No	Inactive	Logic Alarm 1	No	Inactive	Logic Alarm 2	No	Inactive	Logic Alarm 3	No	Inactive
Over kW	No	Inactive	Logic Alarm 1	No	Inactive	Logic Alarm 2	No	Inactive	Logic Alarm 3	No	Inactive	Logic Alarm 4	No	Inactive	Logic Alarm 5	No	Inactive
Over kVAR	No	Inactive	Logic Alarm 2	No	Inactive	Logic Alarm 3	No	Inactive	Logic Alarm 4	No	Inactive	Logic Alarm 5	No	Inactive	Logic Alarm 6	No	Inactive
Over kVA	No	Inactive	Logic Alarm 3	No	Inactive	Logic Alarm 4	No	Inactive	Logic Alarm 5	No	Inactive	Logic Alarm 6	No	Inactive	Logic Alarm 7	No	Inactive
Lead PF, True	No	Inactive	Logic Alarm 4	No	Inactive	Logic Alarm 5	No	Inactive	Logic Alarm 6	No	Inactive	Logic Alarm 7	No	Inactive	Logic Alarm 8	No	Inactive
Lag PF, True	No	Inactive	Logic Alarm 5	No	Inactive	Logic Alarm 6	No	Inactive	Logic Alarm 7	No	Inactive	Logic Alarm 8	No	Inactive	Logic Alarm 9	No	Inactive
Lead PF, Displacement	No	Inactive	Logic Alarm 6	No	Inactive	Logic Alarm 7	No	Inactive	Logic Alarm 8	No	Inactive	Logic Alarm 9	No	Inactive	Logic Alarm 10	No	Inactive
Lag PF, Displacement	No	Inactive	Logic Alarm 7	No	Inactive	Logic Alarm 8	No	Inactive	Logic Alarm 9	No	Inactive	Logic Alarm 10	No	Inactive			
Over kW Dmd, Present	No	Inactive	Logic Alarm 8	No	Inactive	Logic Alarm 9	No	Inactive	Logic Alarm 10	No	Inactive						
Over kW Dmd, Last	No	Inactive	Logic Alarm 9	No	Inactive												
Over kW Dmd, Predicted	No	Inactive	Logic Alarm 10	No	Inactive												
Over kVAR Dmd, Present	No	Inactive															
Over kVAR Dmd, Last	No	Inactive															
Over kVAR Dmd, Predicted	No	Inactive															
Over kVA Dmd, Present	No	Inactive															
Over kVA Dmd, Last	No	Inactive															
Over kVA Dmd, Predicted	No	Inactive															
Over Frequency	No	Inactive															
Under Frequency	No	Inactive															
Over Voltage Unbalance	No	Inactive															
Over Voltage THD	No	Inactive															

Device Time 3/5/2020 11:53:00.000 AM
Device Type PM5760

11:52 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-overalarmone]

File Edit Options View Window Help

PM.5760

Over Alarm - 1 Over Alarm - 2 Under Alarm Digital/Unary Alarm Sag/Swell Alarm [Back to Alarms](#)

Over Alarm Setup - 1

Source	Pickup		Dropout		Enabled	Priority	Digital O/P
	Setpoint	Delay(secs)	Setpoint	Delay(secs)			
Over Current, Phase	60.00 A	900,000.00	50.00 A	1.00	No	Low	None
Over Current, Neutral	50.00 A	1.00	40.00 A	0.00	No	High	None
Over Current, Ground	10.00 A	0.00	0.00 A	0.00	No	None	None
Over Voltage, L-L	240.00 V	2.00	220.00 V	1.00	No	High	None
Over Voltage, L-N	200.00 V	2.00	195.00 V	1.00	No	High	None
Over kW	45.00 kW	0.00	0.00 kW	0.00	No	Med	None
Over kVAR	10.00 kVAR	0.00	0.00 kVAR	0.00	No	None	None
Over kVA	7.00 kVA	0.00	6.00 kVA	0.00	No	High	None
Lead PF, True	2.00	0.00	1.00	0.00	No	None	None
Lead PF, Displacement	1.00	0.00	1.00	0.00	No	None	None
Over Voltage THD	0.00 %	0.00	0.00 %	0.00	No	None	None
Over Residual Current I5 Alarm - 1	0.55 A	2.00	0.45 A	1.00	No	High	None
Over Residual Current I5 Alarm - 2	0.60 A	1.00	0.45 A	0.00	No	Med	None
Over Residual Current I6 Alarm - 1	0.51 A	1.00	0.45 A	1.00	Yes	High	None
Over Residual Current I6 Alarm - 2	0.66 A	1.00	0.45 A	1.00	Yes	Med	None

Device Time 3/5/2020 11:53:37.000 AM
Device Type PM5760

11:52 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-overalarmtwo]

File Edit Options View Window Help

PM.5760

Over Alarm - 1 Over Alarm - 2 Under Alarm Digital/Unary Alarm Sag/Swell Alarm [Back to Alarms](#)

Over Alarm Setup - 2

Source	Pickup		Dropout		Enabled	Priority	Digital O/P
	Setpoint	Delay(secs)	Setpoint	Delay(secs)			
Over KW Dmd, Present	10.00 kW	0.00	5.00 kW	0.00	No	High	None
Over kW Dmd, Last	0.00 kW	0.00	0.00 kW	0.00	No	None	None
Over kW Dmd, Predicted	0.00 kW	0.00	0.00 kW	0.00	No	None	None
Over kVAR Dmd, Present	0.00 kVAR	0.00	0.00 kVAR	0.00	No	None	None
Over kVAR Dmd, Last	0.00 kVAR	0.00	0.00 kVAR	0.00	No	None	None
Over kVAR Dmd, Predicted	0.00 kVAR	0.00	0.00 kVAR	0.00	No	None	None
Over kVA Dmd, Present	0.00 kVA	0.00	0.00 kVA	0.00	No	None	None
Over kVA Dmd, Last	0.00 kVA	0.00	0.00 kVA	0.00	No	None	None
Over kVA Dmd, Predicted	0.00 kVA	0.00	0.00 kVA	0.00	No	None	None
Over Frequency	49.50 Hz	0.00	49.00 Hz	0.00	No	High	None
Over Voltage Unbalance	33.00 %	1.00	30.00 %	0.00	No	High	None

Device Time 3/5/2020 11:54:04.000 AM
Device Type PM5760

11:53 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-underalarm]

File Edit Options View Window Help

PM.5760

Over Alarm - 1 Over Alarm - 2 Under Alarm Digital/Unary Alarm Sag/Swell Alarm [Back to Alarms](#)

Under Alarm Setup

Source	Dropout		Pickup		Enabled	Priority	Digital O/P
	Setpoint	Delay(secs)	Setpoint	Delay(secs)			
Under Current, Phase	50.00 A	2.00	0.00 A	0.00	No	None	None
Under Voltage, L-L	500.00 V	1.00	300.00 V	0.00	No	Med	None
Under Voltage, L-N	0.00 V	0.00	0.00 V	0.00	No	None	None
Lag PF, True	0.98	0.00	0.80	0.00	No	High	None
Lag PF, Displacement	0.00	0.00	0.00	0.00	No	None	None
Under Frequency	60.00 Hz	0.00	50.00 Hz	0.00	No	High	None
Phase Loss	0.00 V	0.00	0.00 V	0.00	No	None	None

Device Time 3/5/2020 11:54:29.000 AM
Device Type PM5760

11:53 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-digitalunaryalarmset]

File Edit Options View Window Help

PM.5760

Over Alarm - 1 Over Alarm - 2 Under Alarm Digital/Unary Alarm Sag/Swell Alarm [Back to Alarms](#)

Digital Alarm Setup

Source	Setpoint	Pickup Delay (secs)	Dropout Delay (secs)	Enabled	Priority	Digital O/P
Digital Alarm D11	OFF2ON	99,999,999.00	2,147,483,647.00	No	Med	None
Digital Alarm D12	OFF2ON	1.00	0.00	Yes	High	None
Digital Alarm D13						
Digital Alarm D14						

Unary Alarm Setup

Source	Enabled	Priority	Digital O/P
Meter Power Up	Yes	Low	None
Meter Reset	Yes	Low	None
Meter Diagnostic	Yes	High	None
Phase Reversal	No	None	None

Device Time 3/5/2020 11:54:52.000 AM
Device Type PM5760

11:53 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-sagswell]

File Edit Options View Window Help

PM.5760

Over Alarm - 1 Over Alarm - 2 Under Alarm Digital/Unary Alarm Sag/Swell Alarm [Back to Alarms](#)

Sag/Swell Alarm Setup

Source	Enabled	Priority	Digital O/P
Voltage Sag	Yes	High	DO1
Voltage Swell	Yes	High	DO2

Power Quality Reference Voltage	180.00	v
Sag Threshold	90.00	%
Swell Threshold	110.00	%
Hysteresis	5.00	%

Device Time 3/5/2020 11:55:12.000 AM
Device Type PM5760

11:54 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-diag]

File Edit Options View Window Help

PM.5760

Volts/Amps | Power Quality | Energy & Dmd | Inputs/Outputs | Alarms | Diagnostic | [Back to Network](#)

Power Meter Module		Demand Interval	
VT Primary	120.0 V	Power (in mins)	15.0
VT Secondary	120.0 V	Power Sub-Interval (in mins)	15.0
CT Primary	500.0 A	Current (in mins)	15.0
CT Secondary	5.0 A	Current Sub-Interval (in mins)	15.0
VT Connection Type	Direct Connect		
Nominal Voltage	230.0 V		
Nominal Current	5.0 A		
Nominal Frequency	50.0 Hz		
Nominal Phase Rotation	ABC		
System Restart Counter	58.0		
Control Power Outage Counter	1,469.0		
Cause of Last Meter Reset	Power Outage		
Volts Mode	3-phase 4-wire Wye Grounded		

Diagnostic Indication	
Meter Error	No
RAM Error	No
NVRAM Error	No
RTC Error	No
Calibration Error	No
Clipping	No

Miscellaneous		Calculation Method	
Meter On Duration	1,404 Hrs	Power Demand	Thermal
Revenue Security Status	Inactive	Current Demand	Thermal

Serial Number 214000036 F/W Rev 3011

Device Time 3/5/2020 11:55:45.000 AM
Device Type PM5760

11:54 AM

Vista - supervisor - Power Monitoring Expert - [User Diagram:PM5500_FAC-PQ-4WYE_V1.0.0-reseteventcnt]

File Edit Options View Window Help

PM.5760 [Back to Diagnostic](#)

Maintenance Log - Resets

Resets		Events	
Min/Max	Last Operation	Miscellaneous	Last Operation
Long Term	2/21/2020 09:04:43.000 AM	Last Control Power Outage	2/25/2020 12:14:37.000 PM
Power Demand	2/21/2020 09:03:41.000 AM	Last Unit Restart	2/26/2020 04:38:15.000 PM
Current Demand	2/21/2020 09:04:58.000 AM		

Energy	
	Last Operation
Accumulated	2/21/2020 09:03:36.000 AM
Multi Tariff	2/19/2020 12:12:08.695 PM

Device Time 3/5/2020 11:56:03.000 AM
Device Type PM5760

11:55 AM

