

# PowerLogic™ PowerView™ Read Me

## INTRODUCTION

This document contains information about some of the features in PowerView. This document is not meant to show step-by-step procedures for using PowerView, but instead contains useful tips and troubleshooting information.

## GENERAL

### Tips and Tricks

1. The following devices are supported by PowerView:
  - PM210
  - PM500
  - PM700 family
  - PM800 family
  - PM800 family with a PM8ECC
  - PM9C
  - ION6200
  - Micrologic Type A, H, and P
  - MC08, MC09, and MC18
  - Basic and enhanced Enercept Meters
  - Micrologic A Compact NSX
  - Micrologic E Compact NSX
2. Logging stops when PowerView is closed.
3. If a device is removed from PowerView, all logged data is deleted.
4. To log into PMCU, enter the default username (**master**) and password (**master**).

## INSTALLATION

### Tips and Tricks

PowerView is always installed on the C:\ drive.

## REAL-TIME DISPLAY TAB

Real-time data is information that PowerView displays as soon as possible after it is collected. The speed with which PowerView can display data depends on such factors as how many devices are being polled and how many quantities are requested.

### Tips and Tricks

1. To rename a device in the Single Device list box, right-click the device, then click **Rename**.
2. The first time each of the real-time views (Summary Pages) is selected, there is a 5 to 15 second delay before the view is shown.
3. If a device is not communicating, the Single Device heading and the device that is not communicating changes to red.
4. If a device is not communicating, communications are restored by right-clicking a single device and then clicking **Restore Communications**.  
*NOTE: It is not possible to restore communications to multiple devices; you must restore communications one device at a time.*
5. Real-time data is updated every 5 seconds. This rate may vary depending on network traffic, communications issues, or the number of devices.

## SETUP TAB

### Find My Devices

Find My Devices on the Setup tab is used to find devices connected to your system via Ethernet or serial connections.

#### Tips and Tricks

1. Device scanning is quicker if Modbus addresses are assigned sequentially. For example, if the first device has address 1, the second device has address 10, and the third device has address 30, it takes much longer to scan for devices than it would if the devices were assigned addresses 1, 2, and 3.
2. To scan a range of IP addresses, enter the starting IP address in the IP address text boxes, then enter the last number of the range into the text box next to the Start Scan button.
3. Only Modbus addresses 1 to 50 are scanned.
4. Only devices supported by PowerView will be scanned.
5. If a number is not entered in the last IP address text box next to the Start Scan button, only one IP address will be scanned.
6. To verify that a device is communicating, select the device in the System Devices list box, then click Verify Communications.
7. After adding, removing, or renaming a device you should click Update System to update the system.
8. Moving a device from the System Devices list box to the Devices Discovered list box and then clicking Update System removes a device and its data from the system.
9. You cannot use an input method editor (IME) to enter IP addresses.
10. Clicking the Scan Options button opens the Scan Options dialog box, which allows you to select between a full scan and a limited scan.
  - A full scan scans for all supported device types. Full scans take longer to complete.
  - A limited scan scans for device types you select in the Scan Options dialog box. A limited scan is much faster than a full scan, so use a limited scan when you know which device types to scan.

### Logging Interval

Logging Interval on the Setup tab is used to select how often data is logged for the devices in PowerView. The default is 15 minutes.

*NOTE: The PowerView Logging Interval setting does not affect the onboard logging interval for a device; it only determines how often PowerView logs data.*

#### Tips and Tricks

1. For the PM820 and the PM850, PowerView uses a combination of real-time, PC-based logging and the onboard logging data from the Power Meter.
2. Onboard logging data is transferred every 2 hours beginning at 4:00 AM. Because of this, some of the most current data from a PM820, PM850, or PM870 will be missing. For example, if a report is run on these devices at 7:00 AM, data will be missing between 6:00 AM and 7:00 AM. This data will be available after it is transferred at 8:00 AM.
3. Devices that perform onboard logging have onboard clocks, such as the PM820, PM850, and PM870. If PowerView is monitoring these devices, the onboard clocks are synchronized to the PC clock at 1:33 AM each morning. Unexpected behavior may occur due to this if multiple PowerView applications are monitoring these devices in different time zones.

## Backup/Restore Database

Backup/Restore Database on the Setup tab is used to back up and restore logged data and device information for the devices monitored by PowerView. Data is stored in three different databases that are created during PowerView installation.

### Tips and Tricks

1. To archive data using PowerView, do the following:
2. On the Setup tab, select Backup/Restore Database.
3. Click Backup Databases.
4. Locate the newly created backup files (SMS\_System.bak, SMS\_AR\_Staging.bak, and SMS\_AR\_Report.bak) in C:\PowerLogic\Software\DB\_Backup.
5. Rename each file by adding the backup date to the filename (for example, rename SMS\_System.bak to 01-01-08\_SMS\_System.bak).

To restore archived data, do the following:

1. Locate the archived files you want to restore in C:\PowerLogic\Software\DB\_Backup.
2. Rename each file by removing the date from the filename (for example, rename 01-01-08\_SMS\_System.bak to SMS\_System.bak).
3. On the Setup tab, select Backup/Restore Database.
4. Click Restore Databases.

*NOTE: When a database reaches its maximum size limit of 2.8 GB, the data first added to the database is deleted to make room for the new data. For example, if you have 32 devices logging the maximum number of topics every 15 minutes, you will be able to store approximately seven months of data before older data is removed.*

## ADD/REMOVE DEVICES

Add/Remove Devices on the Setup tab allows you to manually add and remove devices in PowerView. Devices within the entire 247 address Modbus range may be added with Add/Remove Devices.

### Tips and Tricks

1. To remove devices, select the device in the Remove Device(s) list box, then click Delete Selected Device(s).
2. Devices that utilize accessories, such as the PM810 or Micrologic, will appear as if they have a communications loss if the devices are added with incorrect accessories indicated.
3. If a logging module is installed on a PM810, it must be set up using the PM810 display or with PMCU in order to log data.
4. You cannot use an input method editor (IME) to enter IP addresses.

## REPORT BUILDER TAB

Report Builder tab is used to create reports based on the report type, devices, and quantities selected. Reports are generated by PowerView and displayed in Microsoft Excel.

### Tips and Tricks

1. Devices are added to a report one at a time by first selecting a device in the Select Devices (one at a time) list box (Step 4 section), then double-clicking a quantity in the "Select Quantities for the highlighted Device by double-clicking" list box (Step 5 section). Repeat for each additional device.
2. To remove a device, select the device in the "Your Selections" list box, then click X (delete).
3. To remove a quantity from a device, select the quantity below the device in the Your Selections list box, then click X (delete).
4. To launch the Time of Use (TOU) Editor, select the Time Of Use report in the "Select Report Type" option list (Step 1 section), then click **Display TOU Editor**.

5. The date range in the Step 2 section is automatically set when you first click the Report Builder tab, and the date range will not change while PowerView is running. You must manually change the date range.
6. The “General Measurement” and “THD” reports do not display missing data points in the trend graphs. This is a limitation of Excel. Missing data points will be reflected in the second sheet of the report.
7. The Excel graph generated by the report builder contains line labels. When running reports with a large amount of data, some of the labels may not be visible by default. Resize the graph to display all of the labels.
8. For the Time of Use, Energies By Day, and Energies By Hour reports, missing data points are estimated by PowerView. If PowerView is shut down for a period of time (logging would stop during this period for devices other than PM820s, PM850s, and PM870s) and then restarted, you would see estimated data points when running these three reports.
9. To refresh the list of devices in Report Builder, switch tabs by clicking the Setup or Real-Time Display tab, then switch back to the Report Builder tab.

## TOU EDITOR

The TOU Editor allows you to add or edit a TOU schedule. Time of Use (TOU) schedules are designed to be used in PowerView to accumulate data into "buckets" that match your utility rate schedule. Rate schedules vary not only by day and week, but also by season. The TOU schedules can be set up to match your precise needs. For example, if you are creating an electrical cost summary for weekends in the summer, you can assign a TOU schedule to match this period.

Time of Use metering is defined as:

"A metering method which records demand during selected periods of time so consumption during different time periods can be billed at different rates" (from *Handbook for Electricity Metering*, 9th edition).

### Tips and Tricks

1. To export a schedule, do the following:
  - a. Right-click a schedule, then click Export Schedule.
  - b. In the Save As dialog box, select the folder where the schedule will be saved.
  - c. Enter a name for the file in the File Name text box.
  - d. Select the Save as type (.tou), then click Save.
2. To import a schedule, do the following:
  - a. Right-click Schedules, then click Import Schedule.
  - b. In the Open dialog box, navigate to the folder where the schedule file is located.
  - c. Select the schedule file, then click Open.
3. Normally, you cannot import a schedule more than once. However, after importing a schedule once, you can save that schedule as a new schedule, delete the schedule, and then import the schedule again.

*NOTE: For more information, see the embedded Help in the TOU editor.*

## ADDING A MODBUS DEVICE

- PowerView includes support for many Modbus devices (see “**General**” on page 1). If you need a Modbus device not included with PowerView, contact your local Schneider Electric representative.  
*NOTE: You must supply the register list for third-party Modbus devices.*
- Some third-party Modbus devices will not be found by the Auto Detection tool.