

Downloading a PowerPad® III Model 8336 Recording to DataView®

This Application Note explains how to download saved data from the Model 8336 to a computer and perform other tasks using AEMC's DataView® software. We assume DataView with the PowerPad III Control Panel has been installed on your computer. The DataView PowerPad III Control Panel is the interface for connecting with the Model 8336, downloading test results, and viewing the data on the screen. You can also use the Control Panel to set up recording sessions, view measurement data in real-time, and configure the instrument.

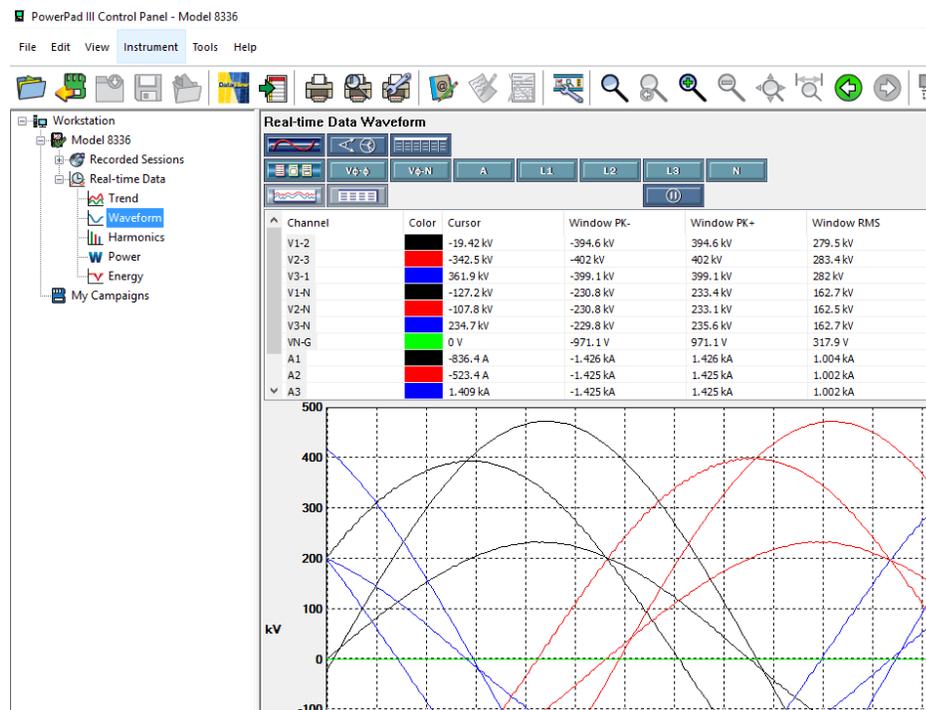
1. Connecting to the instrument

The Model 8336 communicates through a USB cable that comes with the product. Use this cable to connect the instrument to the computer. Then turn the instrument ON and do the following:

1. Start the PowerPad III Control Panel by opening the DataView folder on your desktop and double-clicking the PowerPad III icon.
2. When the Control Panel is open, click Instrument in the menu bar, and select Connect an instrument. The Connect an Instrument Wizard dialog box appears.
3. The name of the instrument is displayed in the Instrument field. Click Next.
4. The Control Panel connects to the instrument. When this is completed successfully, click Finish. The words Connected to Instrument appear in the Control Panel status bar.

2. Viewing real-time data

The Control Panel interface includes a navigation frame on the left and a data frame on the right. The content of the data frame depends on the selection in the navigation frame. For example, to view waveform data currently being measured by the connected instrument, click Real-time Data in the navigation frame, and then click Waveform. The waveform data appears in the data frame, in both tabular and graphical format.

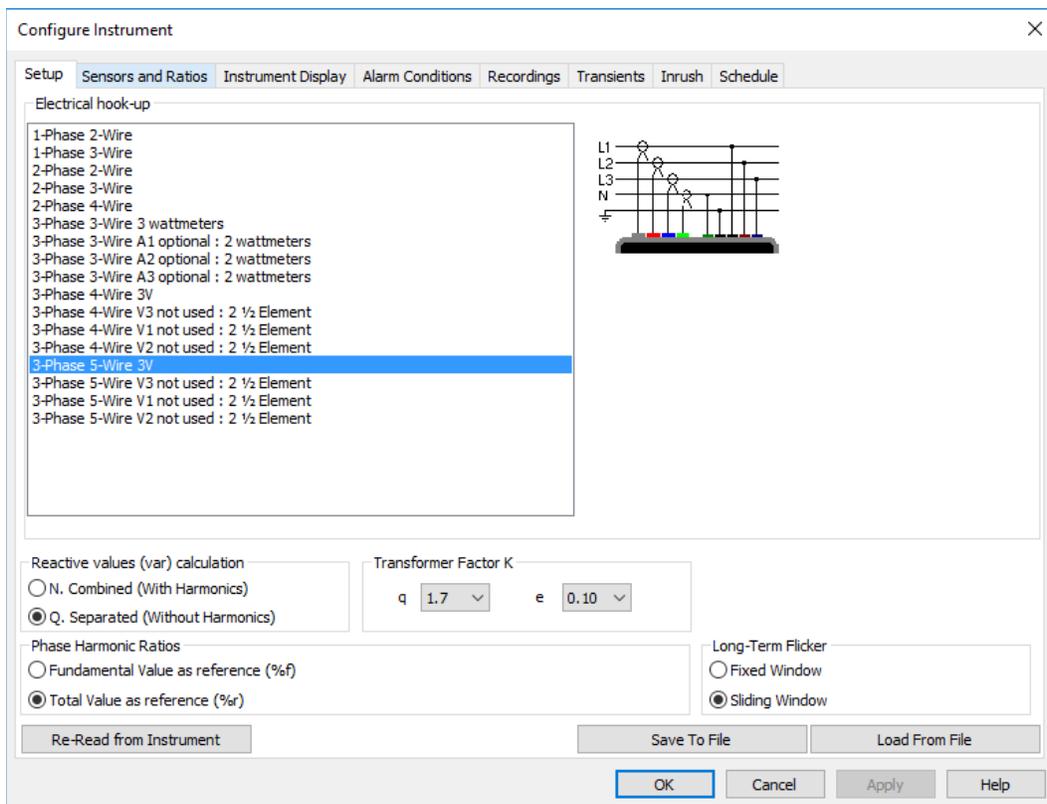


The buttons at the top of the data frame allow you to view this data several different ways. You can also view selected subsets of the data, freeze the updating of measurements on the screen, and display a phasor diagram. These and other features are described in the Help system that comes with the Control Panel.

3. Configuring the instrument

A convenient feature of the Control Panel is its ability to configure the instrument from a computer. For example, you can save an instrument configuration, and use it to configure one or more other instruments. This lets you quickly and easily set up multiple instruments with identical configurations.

With the instrument connected, click Instrument in the menu bar and then select Configure. The Configure Instrument dialog box appears. This is the primary interface for changing settings on the instrument.



The dialog box consists of eight tabs for setting basic parameters, sensors and ratios, alarms, instrument display, and many other settings. You can also set up and schedule a recording session on the instrument.

4. Recording sessions

1. To configure and run a recording session, click the Recordings tab of the Configure Instrument dialog box.

The screenshot shows the 'Configure Instrument' dialog box with the 'Recordings' tab selected. The dialog has several tabs: Setup, Sensors and Ratios, Instrument Display, Alarm Conditions, Recordings (selected), Transients, Inrush, and Schedule. At the top, there is a 'Configuration Number' section with radio buttons for 1, 2, 3, and 4, and an 'Aggregation period' dropdown set to '10 min'. Below this are 'All' and 'None' buttons. The main area is titled 'Data to Record' and contains a grid of checkboxes for various electrical parameters. At the bottom, there is a 'Harmonic Values to Record' section with a table for selecting harmonic ranges and options for odd harmonics. At the very bottom are buttons for 'Re-Read from Instrument', 'Save To File', 'Load From File', 'OK', 'Cancel', 'Apply', and 'Help'.

Data to Record						
<input checked="" type="checkbox"/> V ϕ - ϕ rms	<input checked="" type="checkbox"/> V ϕ - ϕ DC	<input checked="" type="checkbox"/> V ϕ - ϕ pk+	<input checked="" type="checkbox"/> V ϕ - ϕ pk-	<input checked="" type="checkbox"/> V ϕ - ϕ CF	<input checked="" type="checkbox"/> V ϕ - ϕ THDf	<input checked="" type="checkbox"/> V ϕ - ϕ THDr
<input checked="" type="checkbox"/> V ϕ -N rms	<input checked="" type="checkbox"/> V ϕ -N DC	<input checked="" type="checkbox"/> V ϕ -N pk+	<input checked="" type="checkbox"/> V ϕ -N pk-	<input checked="" type="checkbox"/> V ϕ -N CF	<input checked="" type="checkbox"/> V ϕ -N THDf	<input checked="" type="checkbox"/> V ϕ -N THDr
<input checked="" type="checkbox"/> A rms	<input checked="" type="checkbox"/> A DC	<input checked="" type="checkbox"/> A pk+	<input checked="" type="checkbox"/> A pk-	<input checked="" type="checkbox"/> A CF	<input checked="" type="checkbox"/> A THDf	<input checked="" type="checkbox"/> A THDr
<input checked="" type="checkbox"/> P (W)	<input checked="" type="checkbox"/> P DC (W)	<input checked="" type="checkbox"/> Q (var)	<input checked="" type="checkbox"/> D (var)	<input checked="" type="checkbox"/> S (VA)		
<input checked="" type="checkbox"/> PF	<input checked="" type="checkbox"/> Cos ϕ (DPF)	<input checked="" type="checkbox"/> Tan ϕ				
<input checked="" type="checkbox"/> Pst	<input checked="" type="checkbox"/> Plt	<input checked="" type="checkbox"/> FHL	<input checked="" type="checkbox"/> FK	<input checked="" type="checkbox"/> V ϕ -N unb (u2)	<input checked="" type="checkbox"/> Aunb (u2)	<input checked="" type="checkbox"/> Hz

Harmonic Values to Record.			
<input checked="" type="checkbox"/> V ϕ -N H	0	to	50 <input type="checkbox"/> Odd harmonics only
<input checked="" type="checkbox"/> V ϕ - ϕ H	0	to	50 <input type="checkbox"/> Odd harmonics only
<input checked="" type="checkbox"/> A H	0	to	50 <input type="checkbox"/> Odd harmonics only
<input checked="" type="checkbox"/> S (VA) H	0	to	50 <input type="checkbox"/> Odd harmonics only

This defines what data should be captured during recording sessions. You can create up to four different recording configurations; the **Configuration Number** radio button field at the top of the tab selects the configuration. The other fields in this tab are as follows:

- **Data to Record** displays all the available quantities that can be recorded. Select the quantities you want by checking its check box. You can select all the recordings by clicking the All button, or deselect all of them by clicking None.
- **Harmonic Values to Record** lists available harmonic quantities. Select the ones you want to record by clicking the adjacent check boxes. When you select a quantity, fields appear for entering the harmonic range; allowable values are 0 through 50. You can also choose to record only odd harmonics by clicking the associated check box.
- **Aggregation Period** defines the time interval over which measurements are aggregated. Select the appropriate period from the drop-down list. Options range from one second to 15 minutes.

Note the Transients and Inrush tabs. These provide options for configuring the recording of transients and inrush events respectively.

- Click the Schedule tab. This controls when recording sessions start and stop. These can be general sessions that record the data specified in the Recordings tab. They can also be specific searches for transients, inrush, or alarm events.

Configure Instrument

Setup Sensors and Ratios Instrument Display Alarm Conditions Recordings Transients Inrush Schedule

Electrical hook-up: 3-Phase 5-Wire

Instrument Clock
1/10/2018 6:41:37 AM = 6 min before PC clock Set

Record Now

Use the same dates, times and names for the recordings and searches

	Starting Time	Ending Time	Name
<input type="checkbox"/> Schedule Recording	1/10/2018 6:45 AM	1/10/2018 6:46 AM	
<input type="checkbox"/> Schedule Transient Search	1/10/2018 6:45 AM	1/10/2018 6:46 AM	
<input type="checkbox"/> Schedule Inrush Search	1/10/2018 6:45 AM		
<input type="checkbox"/> Schedule Alarm Search	1/10/2018 6:45 AM	1/10/2018 6:46 AM	

Name is up to 8 chars and contains "A-Z", "0-9", ".".

You have not currently scheduled any recording type.

Re-Read from Instrument Save To File Load From File

OK Cancel Apply Help

At the top of this tab is a read-only field that displays the electrical hook-up, as defined in the Setup tab. The remaining fields on this tab are as follows:

- Instrument Clock** displays the current time of the instrument's system clock. You can change this by clicking the Set button and completing the Date/Time dialog box.
- Record Now** when checked starts a recording immediately when the configuration is written to the instrument. When you select this option, the Duration field is displayed to allow you to set the length of the recording session. Options range from 30 minutes (the default) up to 8 weeks. Selecting Record Now also automatically checks the "Use the same dates, times, and names for the recordings and searches" and Include Recording options.
- Use the same dates, times, and names for the recordings and searches** specifies that all recordings and searches start and stop at the same date and time, and also are stored under the same session name. When this option is selected and Record Now is deselected, the Starting Time and Ending Time fields appear, allowing you to define when the recording and searches start and stop. The session name can be up to eight alphanumeric characters long.

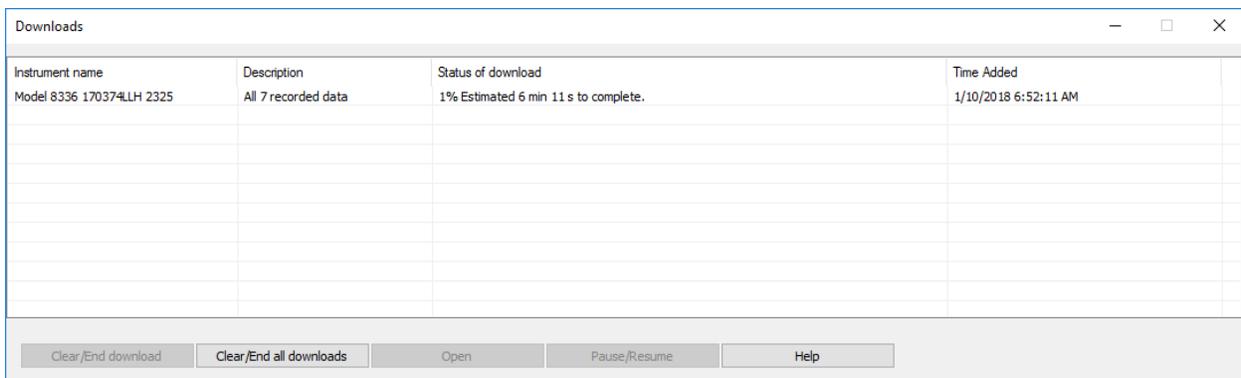
3. The remaining fields in this tab enable you to select and schedule a recording session, transient search, inrush search, or alarm search. (Note that you cannot schedule both an inrush search and alarm search at the same time. If one of these options is selected, the other is automatically deselected.) If you deselect the “Use the same dates, times and names...” field, you can define a separate schedule and name for each recording or search.

Note that if a recording session is already in progress or scheduled, the button End Trends Recording is displayed. You must click this button to end the active or scheduled recording before you can start or schedule a new one.

4. When you have completed the Schedule tab, click OK. The recording and searches will run on the instrument, either immediately or at the schedule times.

5. Downloading recordings

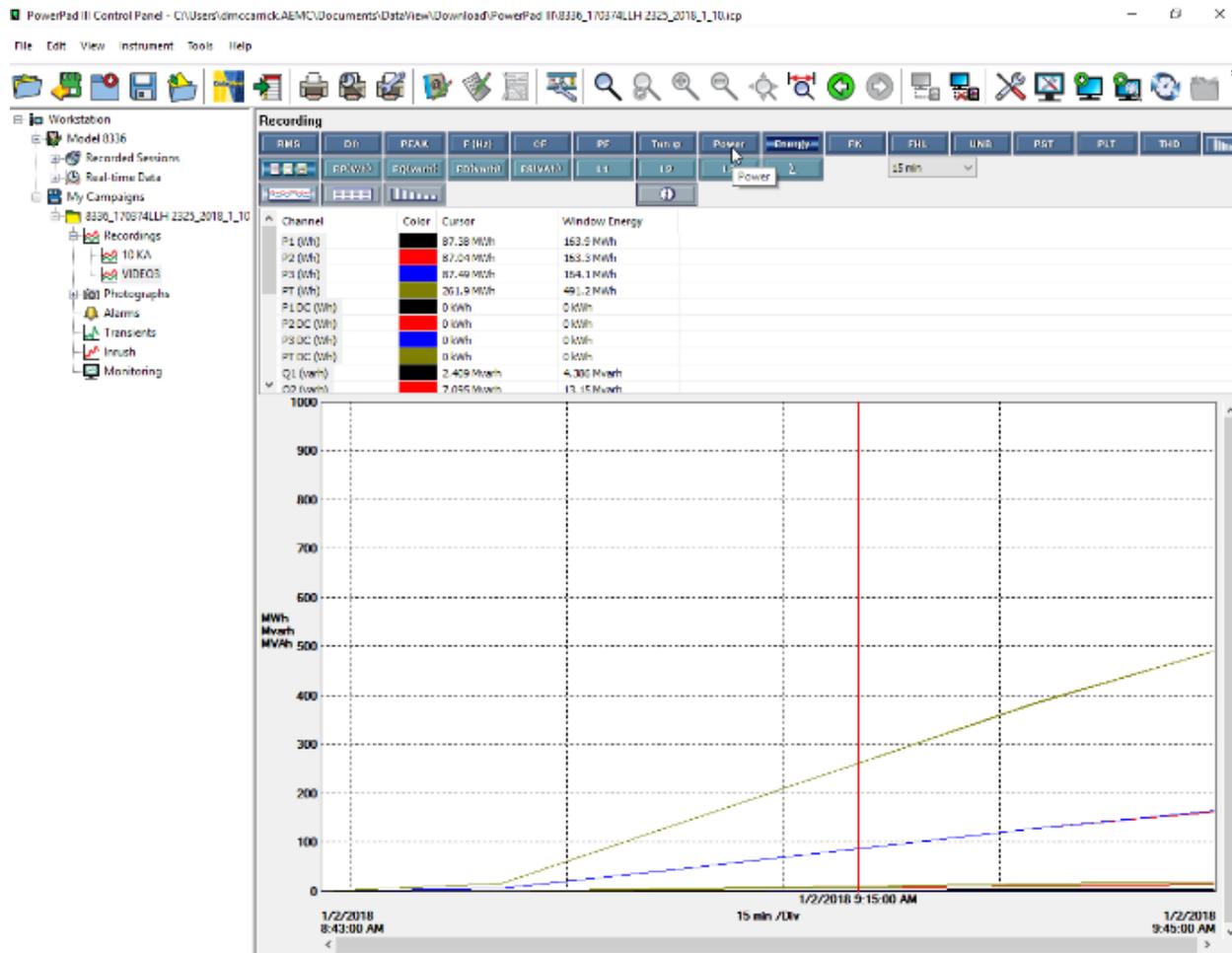
You can download recordings stored on the instrument. To do this, first ensure that real-time data is not being displayed in the data frame; downloading is disabled while real-time data is being displayed. Then click Instrument in the menu bar and select Download Recorded Data, and click Yes when asked to download all data. The Downloads dialog box appears; showing the progress of downloads from the instrument.



Instrument name	Description	Status of download	Time Added
Model 8336 170374LLH 2325	All 7 recorded data	1% Estimated 6 min 11 s to complete.	1/10/2018 6:52:11 AM

Clear/End download Clear/End all downloads Open Pause/Resume Help

When downloads are complete, the instrument name appears under My Campaigns in the navigation frame, with all its downloaded recording sessions displayed in the data frame. Clicking the plus symbol next to the name displays folders containing recordings and searches. These include recordings, photographs, alarms, transients, and inrush searches. Use the buttons at the top of the screen to view this data in a variety of ways.

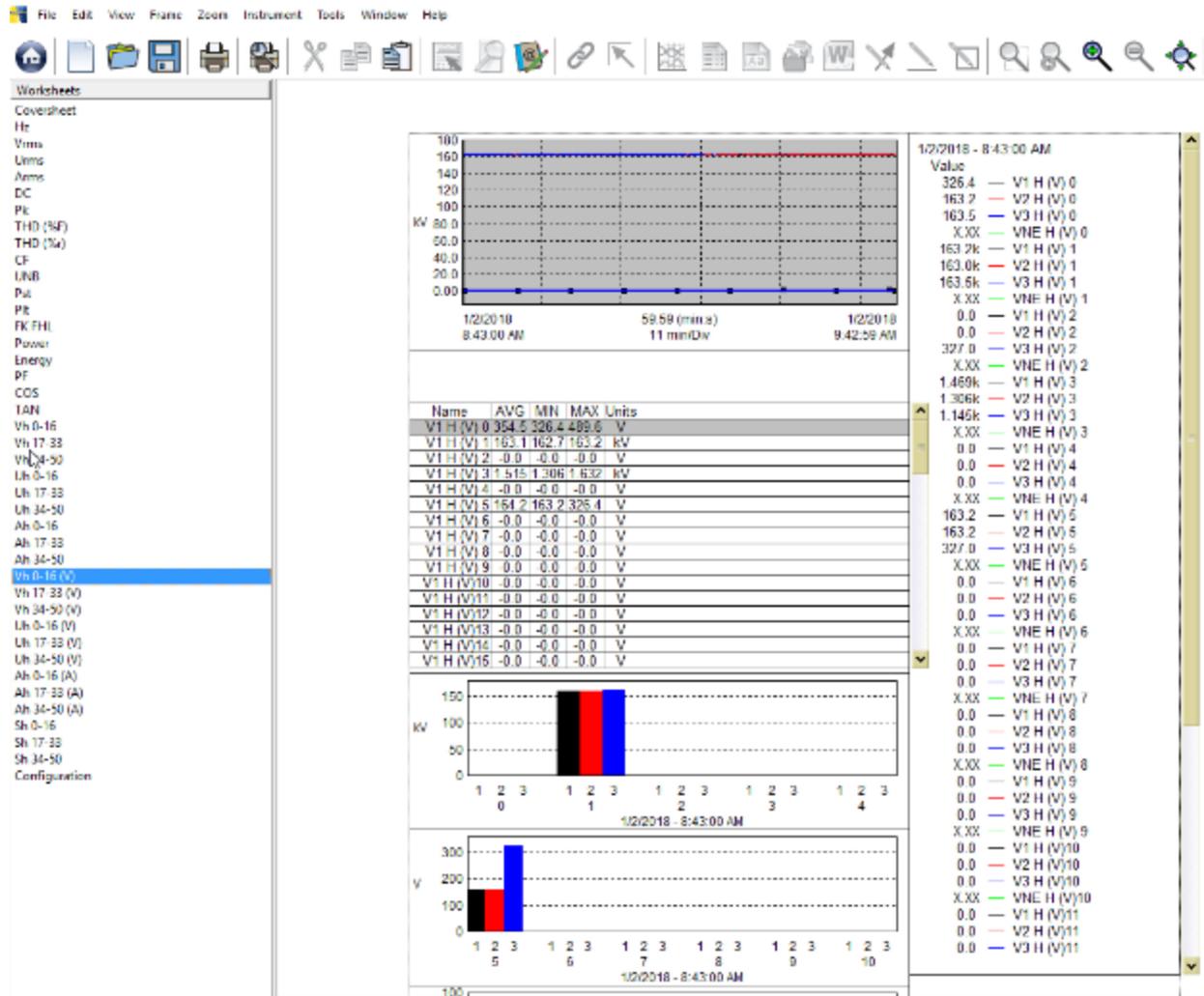


Note that you can also download data from the instrument by removing its SD card and inserting it into the computer. You can then download the recordings into the PowerPad III Control Panel directly from the card. This can save time when downloading a large amount of data.

6. Creating a report

Another important feature of DataView is its ability to generate reports from recorded data.

1. Select a recording in the navigation frame.
2. Click File in the Control Panel menu bar and choose Create DataView report. DataView generates a report from the selected test data, using the default report template.



- To save the report to the computer, click File when viewing the report, and then click Save and specify a location for the saved report file.

Note that DataView includes a number of features that enable you to customize your reports, displaying your test results for a wide range of users and purposes. These report generation features are described in detail in the DataView Help.