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Power Xpert Insight™ is a powerfully simple tool for monitoring electrical systems and energy consumption. Key Features introduced in this guide include Favorites, Alarms, One-lines, Energy, and trends.
Favorites shows only the devices and trends that you select. It’s your custom view of what’s important in your electrical system. For more, see the Favorites section.
Alarms point out what requires attention in your electrical system. Alarms are indications from a device or from the system itself that there may be a problem, such as high voltage or low power factor. For more, see the Alarms section.
The One-lines tab shows the electrical flow for a facility. Each screen contains devices with corresponding symbols that change color based on data the device is collecting and alarms. For more, see the One-lines section.
The One-lines tab has a tree view that shows all of the One-lines in the system. It’s used to add devices to One-lines. The tree also shows all of the publishers that electrical devices use to communicate with the Power Xpert Insight server.
Energy shows demand and energy usage. You can compare demand trends or usage bar charts from multiple devices. For more, see the Energy section.
Eaton’s Customer Success Team is dedicated to Power Xpert Insight support. Reach them by:

- Phone: 1-800-809-2772 (or 414-449-7100) Ext. 4, 1.
- Email: pqsupport@eaton.com
The Power Xpert Insight Admin Guide provides information about installing, deploying, configuring, and maintaining Power Xpert Insight. This guide was written for IT professionals, system administrators, and system integrators.
Favorites
Favorites
Favorites is customized by each user. It shows devices you’ve selected grouped by type. Each device shows the four most relevant channels as well as any active alarms. Any device flagged as a main will be added automatically.
Color is important in Favorites and throughout Power Xpert Insight. A device’s color shows that it’s in one of these states: Normal, Alarm, or Not Communicating.
Clicking a favorite device reveals a menu. Click Alarms or One-lines to move to that tab with the device selected. Click Details to see all device data in a pop out. Unfavorite removes the device from the tab. Move Up or Move Down to changes the device’s position in the group.
Favorites Basics

The graph on the top right shows a trend for a Favorite device, just select the device, channel, and time range.
Hover over the trend graph to enable a button that opens the trend viewer. From there you can compare the Favorites trend with other devices and channels. For more, see the Trends section.
The graph on the bottom right shows energy. Just select the device, usage or demand, and the time range. Only devices that support energy data can be selected.
Click the Add Device button on the Favorites tab to select any device that’s been assigned to a One-line for the Favorites list.
You can also add any device to the Favorites list from the device’s sidebar or from the Device Details Pop Out.
Alarms
Power Xpert Insight shows alarms when devices indicate something is wrong.
Alarms arrive with a time stamp, status, and message, which may be updated as conditions change.
A pop out with all information about the alarm, including trends, waveforms, and history, can be seen by selecting Alarm Details in the sidebar.
Users acknowledge alarms to indicate they’ve seen the problem and to reset the trigger. You can acknowledge alarms individually using the inline acknowledge button.
You can acknowledge alarms in groups using the check boxes, then clicking Acknowledge at the top. The top check box will select all.
You can add Notes to communicate extra details by selecting Add Note from the side bar. Notes are visible to anyone who views the alarm in the future.
Past alarms are always available for viewing by choosing All or Acked Alarms from the top of the list.
When you click the Alarms tab, all unacknowledged alarms for all connected devices and all active alarms are shown. These are called Open Alarms.
Alarms are active when the condition that caused the alarm is still present. Even if an active alarm has been acknowledged, it still shows under Open Alarms until the condition goes away.
Alarms that no longer show under Open Alarms can be found by selecting Acked Alarms or All.
By default, alarms are sorted by date. You can also sort by device or priority.
The time range for alarms by default is all dates. You can filter the list to show a specific date range, which may be helpful if you select All or Acked Alarms.
When you click the Alarms tab, alarms show for all devices. By selecting the filter icon at the top left, you can filter the list to show alarms from a single device.
Once the list has been filtered by device, you can view a group of devices or move back to viewing all devices using the links.
One-lines
One-lines are the main way devices are visualized in Power Xpert Insight. Each device added to the system can be added to a One-line graphic. For more on setting up One-lines, see the Editing section.
Each device added to a One-line has a corresponding data block with the device name, model and the four most important channels. This block will turn red when the device is in alarm.
Each device also has a corresponding symbol, and if rules have been set up, the symbol will animate according to the device status. For more on animating symbols, see the Editing section.
Clicking on a device will reveal the top 16 data channels for that device in the sidebar, as well as an action drop down to get at even more data including Trend Viewer and Device Details.
One-lines may also contain links to other One-line screens. Clicking on the symbol or box will drill in to the linked One-line.
One-lines Basics

To navigate back use the links in the header.
For a full set of information about the device, you can access Device Details from the:

- Favorites in-line menu.
- Alarms sidebar dropdown.
- One-lines sidebar dropdown
- Alarm Details
The Device Details pop out has various sections depending on the device. The first section shows the top 16 channels.
Below is a Trend Viewer that plots the top four channels. You can launch the full Trend Viewer using the Open Viewer button.
The last section in details is All Channels. Channels are organized into groups by electrical measurement category.
Energy
Energy
The Energy tab shows either demand or usage. You can select which one to view in the top right corner of the left section.
Demand graphs Real Power (typically in kW) and shows the peak value for the selected time period, as well as the load factor. Load factor is the average demand divided by the peak demand.
Usage compares energy usage (typically kWh) across devices. It also shows the peak period for each device.
The usage graph can be stacked to show cumulative usage for each time period.
To add a device to the graph, check the box next to it in the left column.
Move the cursor to view the energy values for a given time.
Clear a check box on the right to remove a device from the graph. Clear a check box on the left to remove that channel from the graph list.
Click the time range control to select the date and time range.
If a device is designated as a main, it will automatically appear in the Energy device list. This list, unlike Favorites, is shared across all users of your system.
To add additional devices, click Add Device and select them from the dropdown.
Clicking a device reveals a menu to remove it from the list, or move it up or down.
Trends
Trends
You can launch the Trend Viewer from the:

- Favorites trend graph
- One-lines device sidebar
- Device Details pop out
- Alarm Details pop out
You can add devices to the Trend Viewer using the Add Device button.
You can add a channel to the graph using the Add Channel button. The channels are added to all relevant devices open in the viewer.
Clear a check box to remove a trend line from the graph.
Click a channel to add additional trends if available for minimum, maximum, or actual values.
Trend Viewer Basics

To zoom, click the zoom button in the top right corner and then drag the mouse cursor to define a zoom-in area. Click Zoom Out to return to normal view. Click the pan button in the top right corner to move the zoomed graph area around.
Click the export arrow at the far right in the toolbar to save the trend data to a CSV file. By default, only visible content is exported. You can add more data by changing the time interval, range, or selecting all channels.
Waveforms are pictures of electrical flow over tiny snippets of time. Unlike trends, they are captured by devices as a file and downloaded for viewing in Power Xpert Insight.
Waveforms are only available for certain devices depending on that devices capabilities, but if they are present they can be accessed from the:

- Alarm Details pop out
- Device Details pop out
- One-lines device sidebar dropdown
Once the waveform is open you can view various items depending on the capabilities of the device including current and voltage waveforms, digital input changes and harmonics.
You can use settings to customize both what you see when Power Xpert Insight opens and how it behaves.
Under User, you can choose which tab is shown and which One-line appears when you start Power Xpert Insight. This only affects your account, not other users.
Confirmations controls which prompts you’ll see to confirm an action. If you don’t want to see prompts for an action, deselect it.
Editing
Editing
Adding Devices

Power Xpert Insight connects to device data through publishers, which are either standalone Eaton devices, the Power Xpert Gateway, or the Power Xpert bridge. You add publishers via import or one at a time by specifying IP addresses and login information.
Adding Devices

To add a publisher, click Edit on the One-lines tab, tree view.
Editing

Adding Devices

Adding One-lines

Arranging Graphics

Moving Items in the Tree

Adding Text

Drawing Lines

Animating Symbols

Adding Devices

Next click Add Publisher/Device...
Adding Devices

Select by IP address, then Next...
Fill in the IP address, port, User ID, and password, then click Next...
If the connection information was correct, the name of the publisher will appear, which can be updated. After clicking Add Device, you should see a confirmation box and the device will appear in the tree.
If Power Xpert Insight could not connect to the device, an error box appears. You may need to verify the IP address and login information, or check connections.
For information on importing devices, see the Power Xpert Insight Admin Guide.
Adding One-lines

One-lines are the way to group electrical devices and creating One-lines is the first step to creating a graphical representation of your system. To create a One-line, click Edit on the One-lines tab, Tree view.
Adding One-lines

Click Add One-line, and a new One-line will appear with the name “New One-line.” You can update the name in the sidebar.
You can arrange the device tree by dragging. Drag between One-lines or devices to change order.
Moving Items in the Tree

Drag over a One-line to nest.
Arranging Graphics

To create graphics for a selected One-line, click Edit in the Graphic view.
Click the hand button to reposition devices and symbols.
Arranging Graphics

Drag the symbol at the top of a device to move both the symbol and the related data box.
Arranging Graphics

Drag the box to move it separately from the symbol.
Arranging Graphics

Drag additional One-line symbols from the palette on the right to represent devices that do not communicate with Power Xpert Insight.
Click Rotate to rotate a selected object 90°. For devices, only the attached symbol rotates.
Click the T button to add text to your One-line.
Click to select the starting point for your text. Press Enter to add another line.
To edit existing text, click the T button, then click the text box.
Adding Devices to the Graph

Working with the Graph Viewer

Cumulative and Individual Graphs

Exporting Energy Data
Click the line button to draw a vertical or horizontal line.
Drawing Lines

Click a line to select it. Drag the end circles to make it longer or shorter. Drag the line itself to reposition it. Use the arrow keys to make fine movements.
You can animate symbols using rules. To build a rule, click the symbol then, click Add State Change Rule.
If the symbol is associated with a device, that device will be selected. If not, you can select which device will influence the animation.
Next, you’ll need to select a channel, operator, and trigger value.
Finally, select a state to correspond to that condition and another state for when the condition is not present. For three or more states, create additional rules.