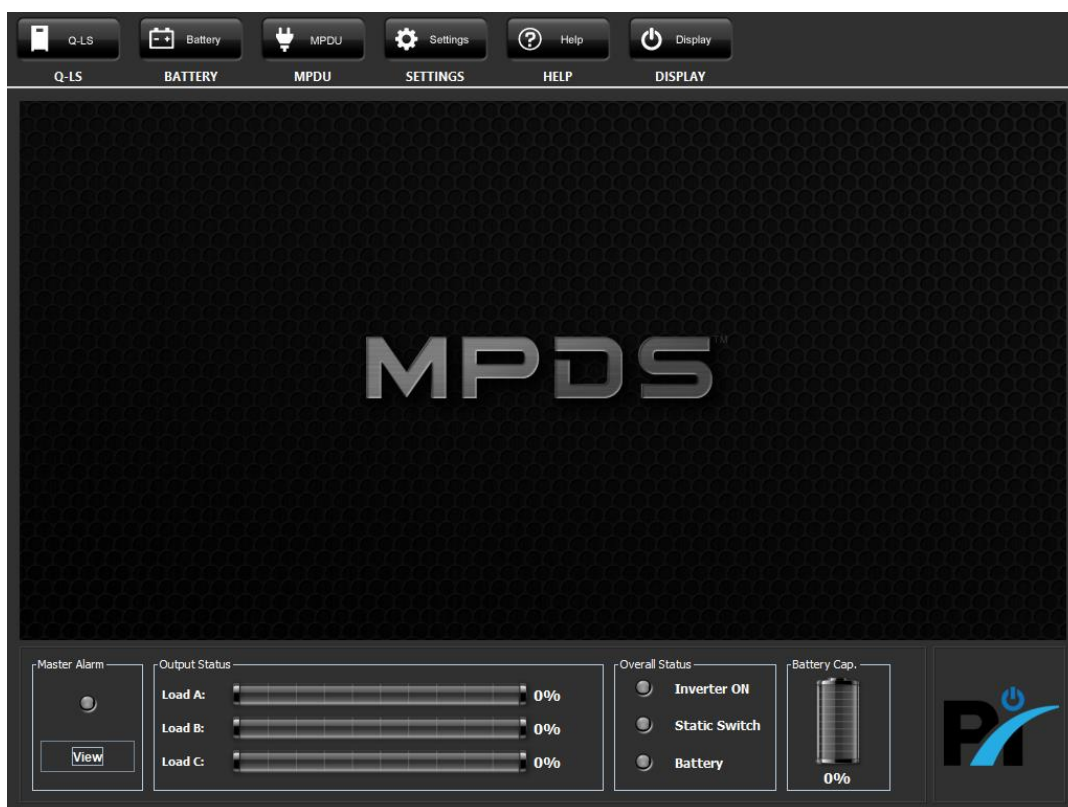


MPDS

Main Power Distribution System Touchscreen Management and Remote Access



User's Guide

MNL152

Rev 3.5

Export Classification EAR99

**READ THIS MANUAL CAREFULLY
SAVE ALL INSTRUCTIONS**

This manual contains important information needed to operate the MPDS™ safely and efficiently. Please read all instructions carefully before installing or operating equipment.

Keep this manual handy for easy reference.

ELECTRICAL WARNING



Applying information contained in this manual to any other product, including customized Q-LS systems with nonstandard specifications, may cause injury.

Q-LS™ and UPQ-NetAgent9™ are trademarks of Power Innovations International, Inc.

This manual may accompany other instructional addendums about additional customizations to standard Q-LS™ systems. Please contact Power Innovations if additional manuals are needed and have not been received.

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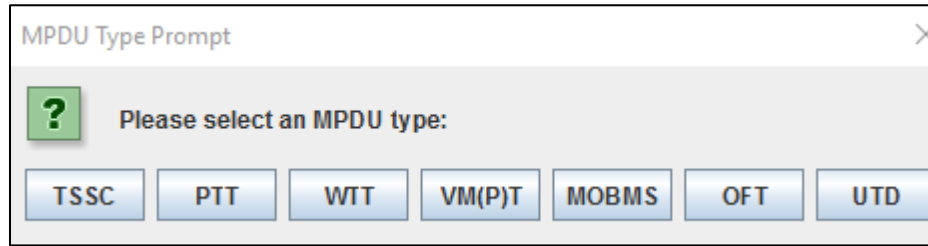
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1—Touchscreen Desktop Basics

When prompted, ensure the correct MPDU type is selected. To change the MPDU type, see section 5.

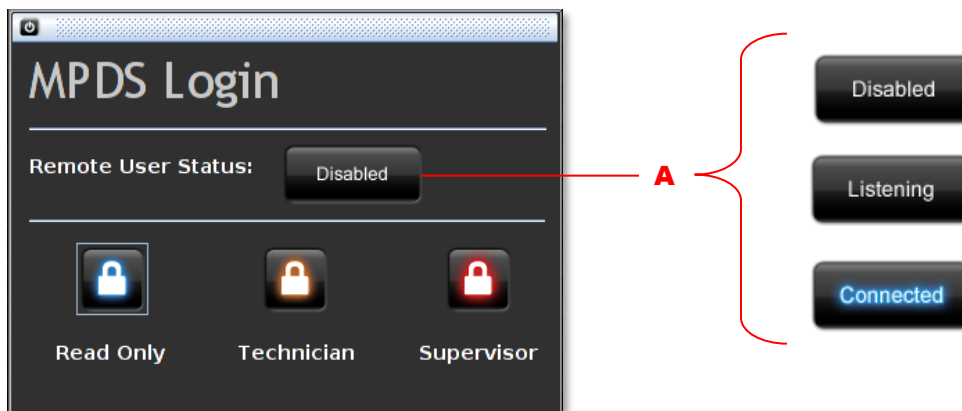


1.1—Cold Start Software Installation

If the system does not have the software installed, refer to the Cold Start Installation Manual included in both the MPDS Cold Start Software CD and in the MPDS Manual CD.

1.2—Logging In

To access the MPDS™ software, select one of the three User permission options. The User options consist of **Read Only**, **Technician**, and **Supervisor**.



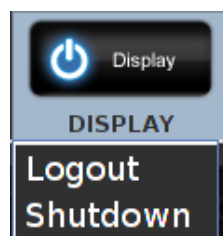
A. This icon gives the current remote user status.

The User permissions for each option are listed as follows:

1. **Read Only** – This User option allows the User to select and view all the menu item buttons except for the *Settings* menu button. The *Settings* menu button is accessible only to a logged in *Technician* or *Supervisor*.
2. **Technician** – When the *Technician* option is selected, a password is required to access the MPDS™ software. All *Read Only* menu item buttons are available to the *Technician*, as well as the .CSV feature in the *Settings* menu item button. A *Technician* can also change the *Technician* login password as well as the *Technician* and *Read Only* system timeout settings.
3. **Supervisor** – When the *Supervisor* option is selected, a password is required to access the MPDS™ software. The Supervisor has access to all menu buttons, as well as the right to change the MPDS™ login passwords and timeouts for all User options including the UPQ, PLC, and remote view connection settings.

1.3—Logging Out

To logout of the MPDS™ software, touch Display > Logout. Once logged out, the MPDS Login prompt will re-appear on the touch screen desktop and the workspace will be cleared.



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1.4—Main Touchscreen Desktop

The main window of this program is the *Touchscreen Desktop*. The menu items and panels are organized in this desktop window in an arrangement called a *workspace*.

You may drag information panels to new locations on the screen, place panels next to each other, and close them within the main application window.

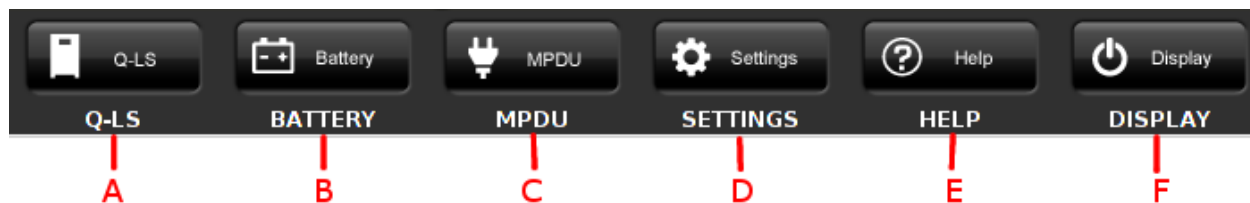


Main workspace

A. Menu Buttons **B.** Float Panel / Main Display Area **C.** Overall Status

1.4.1—Menu Buttons

The top section of the workspace contains six menu items. Features of the MPDS™ software can be accessed by touching the menu item buttons and selecting from the corresponding drop down menus.



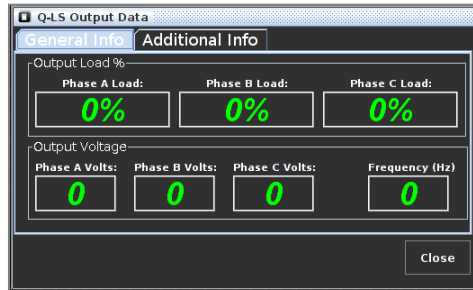
Menu Buttons

The menu buttons provide the user with a wide range of options:

- A. Q-LS: Q-LS status and history.
- B. Battery: Battery status
- C. MPDU: Receptacle, smoke detector, and temperature sensor status information and history.
- D. Settings: System and user settings.
- E. Help: Network information and user manuals.
- F. Display: logout or shutdown interface.

1.4.2—Float Panel/Main Display Area

Menu based features and information will be displayed as float panels within the middle center area of the workspace. The workspace allows the User to have several float panels up at the same time so that a large amount of information may be viewed.



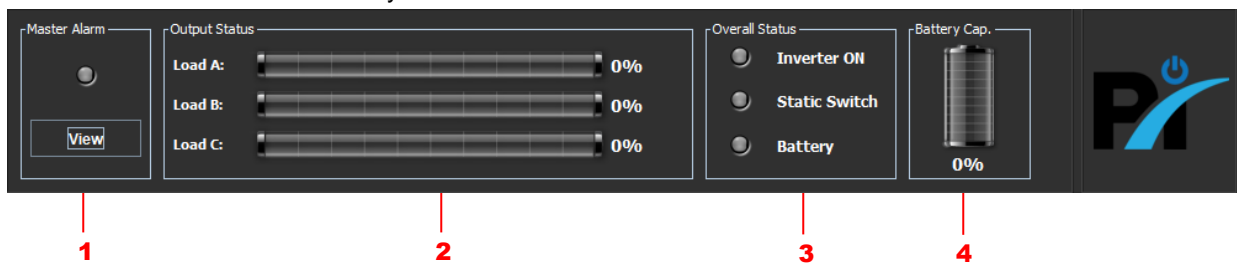
Move and Close Float Panels

Float panels are easy to move around the application window.

- To move a float panel, simply drag the panel to the desired location within the application window.
- To close a float panel, touch its Close button.

1.4.3—Current Status Overview

The status overview is located at the bottom of the workspace and is always viewable. This provides an at-a-glance overall status of the Q-LS system attached to the MPDU.

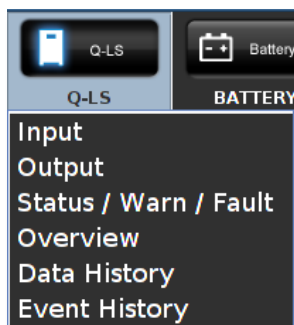


1. The Master Alarm icon will turn red if there are abnormal event situations that require attention. If the icon is red, touch the View button to see the event that caused the alarm.
2. The Output Status shows a percentage value for the output load on phases A, B, and C. When the load is above 90%, the bars turn orange. When the load is above 100%, the bars turn red.
3. The Overall Status contains three icons that light up when the inverter, static switch, and battery are ON. If the inverter, static switch, or battery is not turned ON, the icons will be an unlit gray color. NOTE: If the Battery icon is RED, the system is running on battery power. The Battery icon will be unlit when the system is NOT running off the battery. If the Battery icon is flashing, the battery test has failed.
4. The percentage value given in the Battery Capacity section shows what percentage the batteries are charged. If the Battery Capacity is less than 25%, the percentage bar will turn red. If the Battery Capacity is between 25%-80%, the percentage bar will turn orange. If the Battery Capacity is between 80%-100%, the percentage bar will turn green.

2—Q-LS Touchscreen Navigation

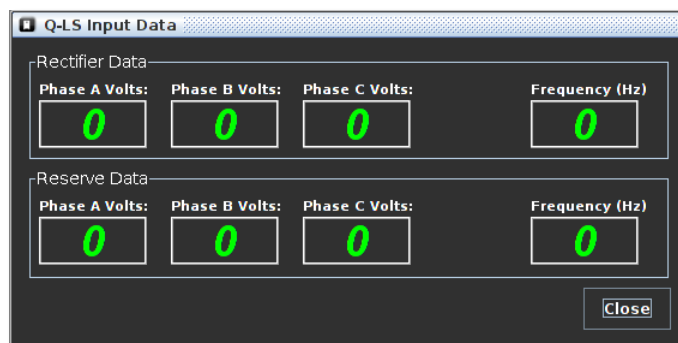
2.1—Q-LS Menu Item Overview

The Q-LS menu item button consists of six drop down menu options that include: **Input**, **Output**, **Status / Warn / Fault**, **Overview**, **Data History**, and **Event History**. Each dropdown option gives different types of information about the Q-LS system.



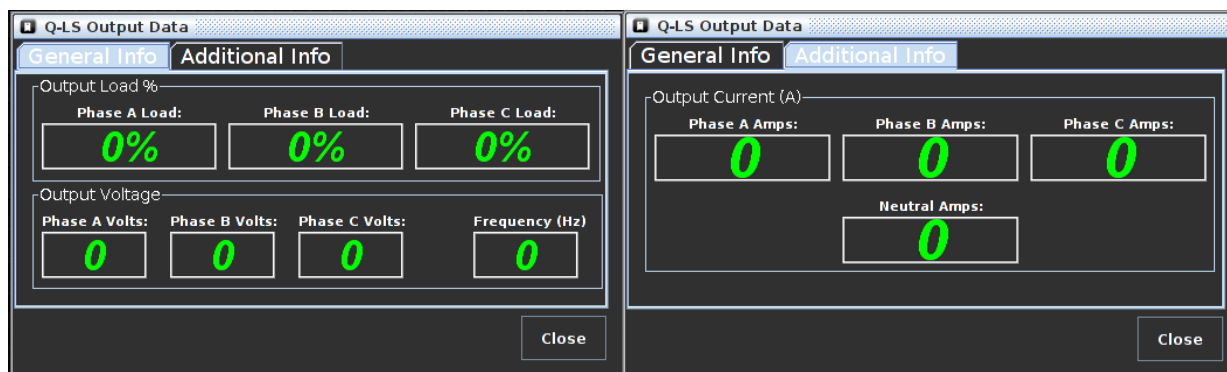
2.2—Input Features

Access the Q-LS input features by touching Q-LS > Input. The Q-LS Input Data float panel reports live at-a-glance rectifier and reserve power input data from the Q-LS system.



2.3—Output Features

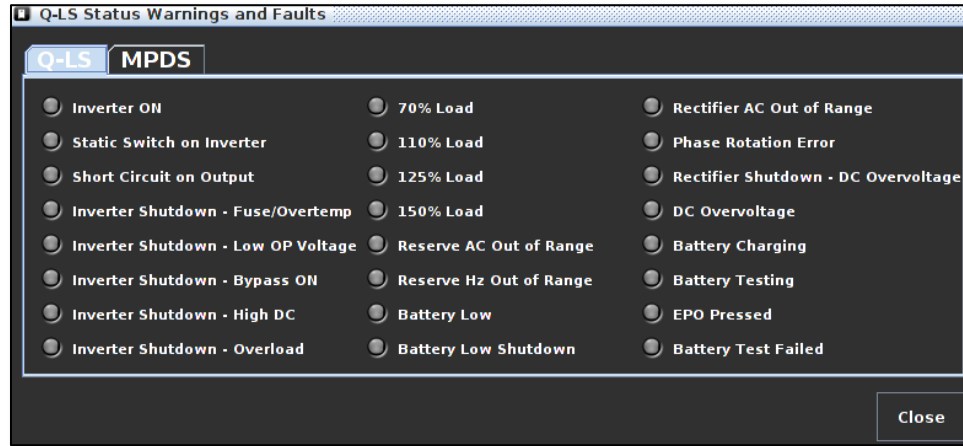
Access the Q-LS output floating panel by touching Q-LS > Output. The Q-LS Output Data float panel reports live at-a-glance output voltage and output load data from the Q-LS system.



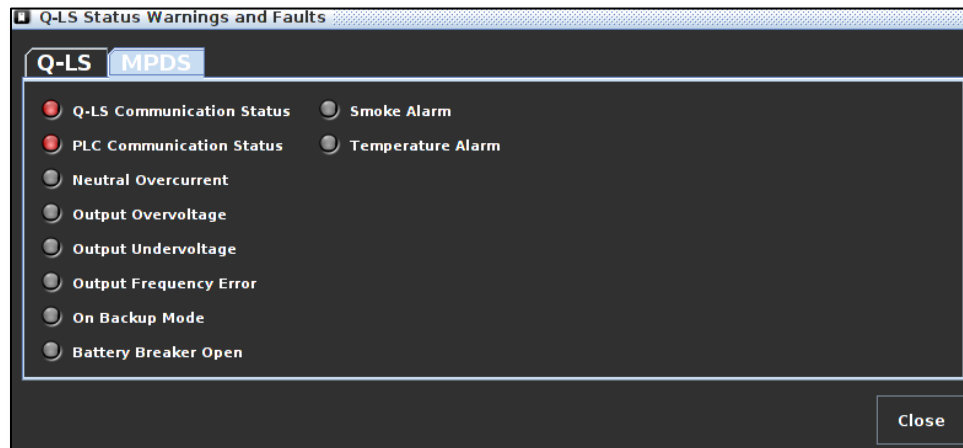
2.4—Status / Warn / Fault Features

Access the Q-LS Status / Warn / Fault floating panel by touching **Q-LS > Status / Warn / Fault**.





Q-LS Tab



MPDS Tab

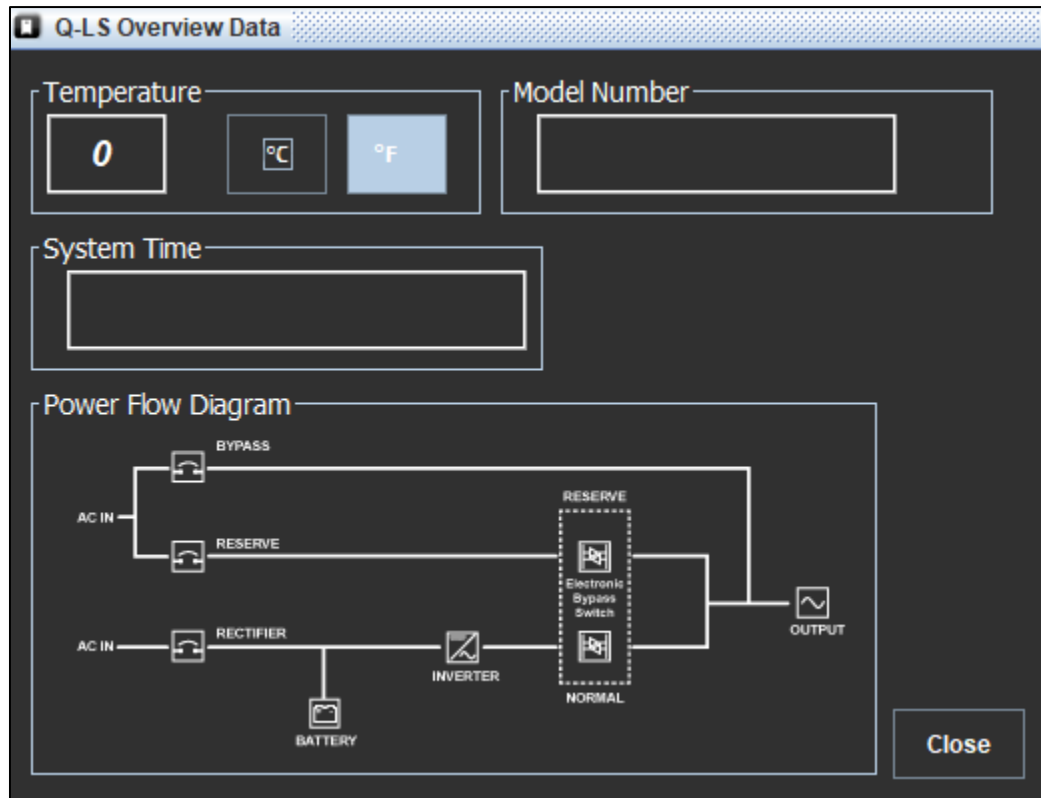


The Q-LS / MPDS Status, Warnings, and Faults float panel shows critical system conditions. Each event is reported through a color-coded icon system. The colors are explained as follows:

1.  The *unlit* icon means there is no condition present for this value.
2.  The *green* icon means the condition is functioning normally. No attention is needed.
3.  The *orange* icon means there is a warning for the condition. Attention may or may not be needed.
4.  The *red* icon means there is a fault status for the condition. Immediate attention is required.

2.5—Overview Features

Access the Q-LS Overview Data float panel by touching **Q-LS > Overview**.



The Q-LS Overview Data float panel displays at-a-glance Q-LS data. This data includes **Temperature**, **Q-LS Model Number**, **Q-LS System Time**, and the current **Power Flow Diagram**.

Change Temperature Display

1. Touch the °C button to display the temperature in Celsius.
2. Touch the °F button to display the temperature in Fahrenheit.

2.6—Data History Features

Access the Data History features by touching *Q-LS > Data History*. The History float panel provides the ability to search for data within User specified timeframes.

NOTE: Retrievable Data History is recorded for one year before the current date.

The History float panel displays a table of data with the following columns: Date/Time, ResC, OPA, OPB, OPC, LoadC, and Fault. The table contains 15 rows of data. Below the table, there are search controls including Date Criteria (Start date: 2012-06-06 13:37:38, End date: 2012-07-06 13:37:42), Start, End, Search, Close, View Status, and Select Variables buttons. A warning message states: "WARNING: Selecting a large date range may require considerable time to process."

Date/Time:	ResC:	OPA:	OPB:	OPC:	LoadC:	Fault:
2012-06-12 11:4...478	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 12:0...483	121	121	121	121	0	OK
2012-06-12 12:0...485	121	121	121	121	0	OK

The *History* float panel consists of the following buttons: **Start**, **End**, **Search**, **Close**, **View Status**, and **Select Variables**.

How to Search

1. **Start** – Touch the *Start* button to enter the starting date range.
2. **End** – Touch the *End* button to enter the ending date range for the search.
3. **Search** – After selecting the start and end dates, touch the *Search* button to query the results.

NOTE: Try to limit the search range as much as possible. A large search range can take a long period of time to process.

The History float panel displays a table of data with the following columns: Date/Time, ResC, OPA, OPB, OPC, LoadC, and Fault. The table contains 15 rows of data. Below the table, there are search controls including Date Criteria (Start date: 2012-06-06 13:37:38, End date: 2012-07-06 13:37:42), Start, End, Search, Close, View Status, and Select Variables buttons. A warning message states: "WARNING: Selecting a large date range may require considerable time to process." A red arrow labeled 'A' points to the Date/Time column header.

Date/Time:	ResC:	OPA:	OPB:	OPC:	LoadC:	Fault:
2012-06-12 11:4...478	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 12:0...483	121	121	121	121	0	OK
2012-06-12 12:0...485	121	121	121	121	0	OK

A. The Date/Time is stamped from the MPDS time rather than the Q-LS time.

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4. **View Status** – To see the status float panel on a specific event, touch an event > View Status.

Date/Time:	ResC:	OPA:	OPB:	OPC:	LoadC:	Fault:
2012-06-12 11:4...478	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:4...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 11:5...483	121	121	121	121	0	OK
2012-06-12 11:5...481	121	121	121	121	0	OK
2012-06-12 12:0...483	121	121	121	121	0	OK
2012-06-12 12:0...485	121	121	121	121	0	OK

Date Criteria:

Start date: 2011-07-09 12:09:33 Start

End date: 2012-07-09 12:09:39 End

Search Close View Status Select Varia...

WARNING: Selecting a large date range may require considerable time to process.

Note: Touch a specific event *before* touching the View Status button.

Once an event has been selected and the *View Status* button has been touched, the Status View float panel will show the recorded data for that specific event time.

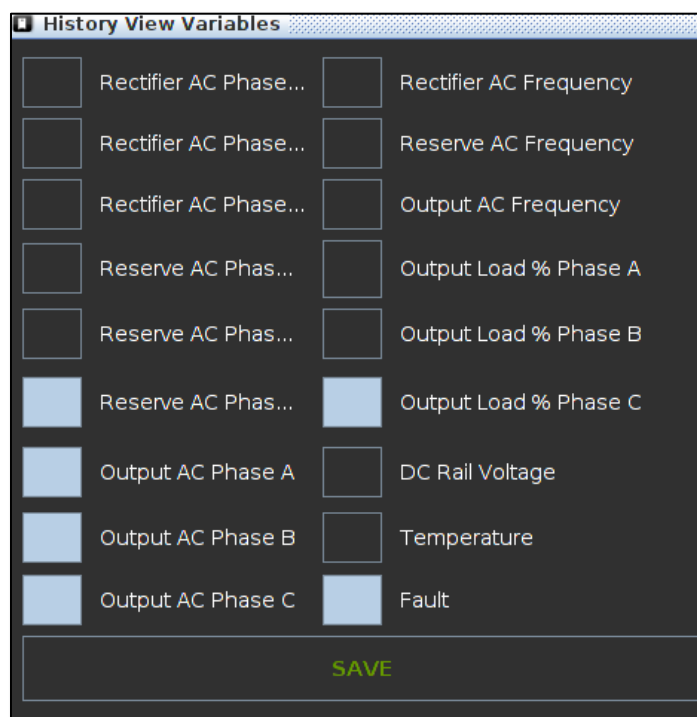
Q-LS Status Warnings and Faults

Q-LS MPDS

- ☐ Inverter ON
- ☐ Static Switch on Inverter
- ☐ Short Circuit on Output
- ☐ Inverter Shutdown - Fuse/Overtmp
- ☐ Inverter Shutdown - Low OP Voltage
- ☐ Inverter Shutdown - Bypass ON
- ☐ Inverter Shutdown - High DC
- ☐ Inverter Shutdown - Overload
- ☐ 70% Load
- ☐ 110% Load
- ☐ 125% Load
- ☐ 150% Load
- ☐ Reserve AC Out of Range
- ☐ Reserve Hz Out of Range
- ☐ Battery Low
- ☐ Battery Low Shutdown
- ☐ Rectifier AC Out of Range
- ☐ Phase Rotation Error
- ☐ Rectifier Shutdown - DC Overvoltage
- ☐ DC Overvoltage
- ☐ Battery Charging
- ☐ Battery Testing
- ☐ EPO Pressed
- ☐ Battery Test Failed

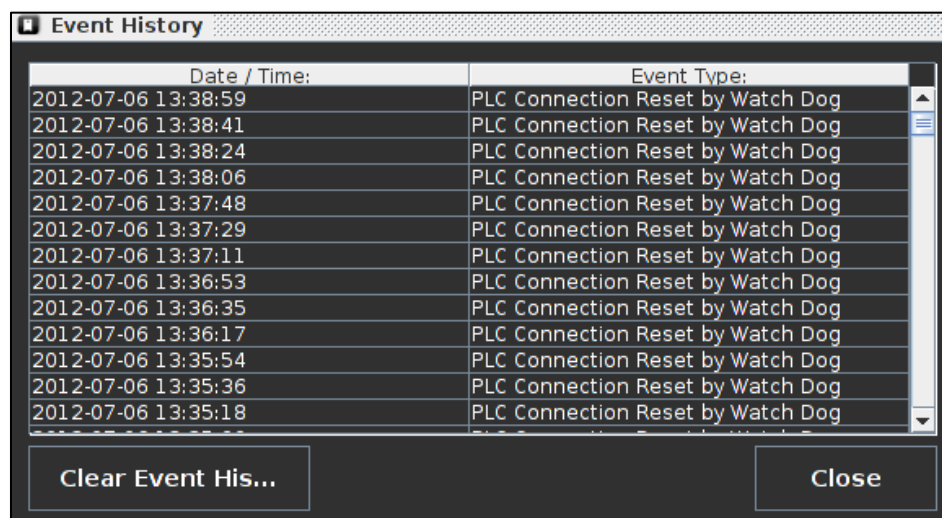
Close

5. **Select Variables** – To select the information that is displayed in the *History* panel, touch the *Select Variable* button to access the *History View Variables* float panel. The *History View Variables* float panel allows the User to select up to six (6) areas of information to be displayed on the *History* float panel by touching the desired information area buttons.



2.7—Event History Features

Access the *Event History* float panel by touching *Q-LS > Event History*. The *Event History* panel shows event history data that occurred within the MPDS™ system. To clear the event history, touch *Clear Event History*. **NOTE: Only a logged in Supervisor can clear the Event History.**



3—Battery Touchscreen Navigation

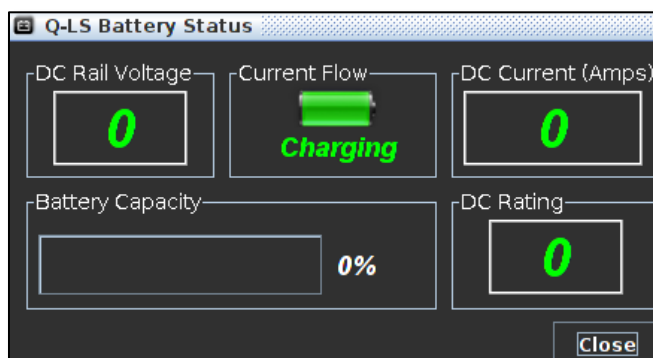
3.1—Battery Menu Item Overview

The Battery menu item button consists of one drop down menu option that includes a **Status** option.



3.2—Status Features

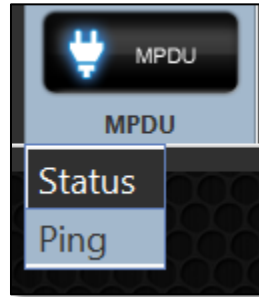
Access the *Q-LS Battery Status* float panel by touching *Battery > Status*. The Q-LS Battery Status panel gives at-a-glance battery information such as: DC Rail Voltage, Current Flow, DC Current (Amps), DC Rating, and Battery Capacity Percentage.



4—PDU Touchscreen Navigation

4.1—MPDU Menu Item Overview

The MPDU menu item button consists of two drop down menu **Status** and **Ping** options.





4.2—Status Feature

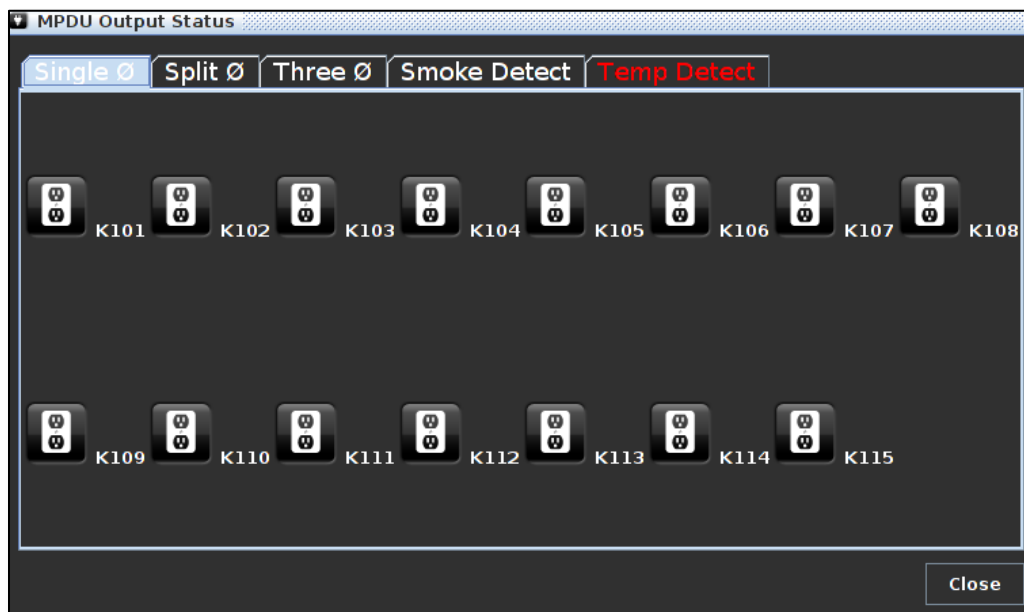
Access the *MPDU Output Status* float panel by touching *MPDU > Status*. The panel gives an at-a-glance Output Power Status for the Single and Three Phase outputs, as well as smoke and temperature detection relays.

The name of the tabs, the number of outputs on each tab, and the type of outlet (phase/amps) may vary depending on the number and type of outlets installed in the MPDU.

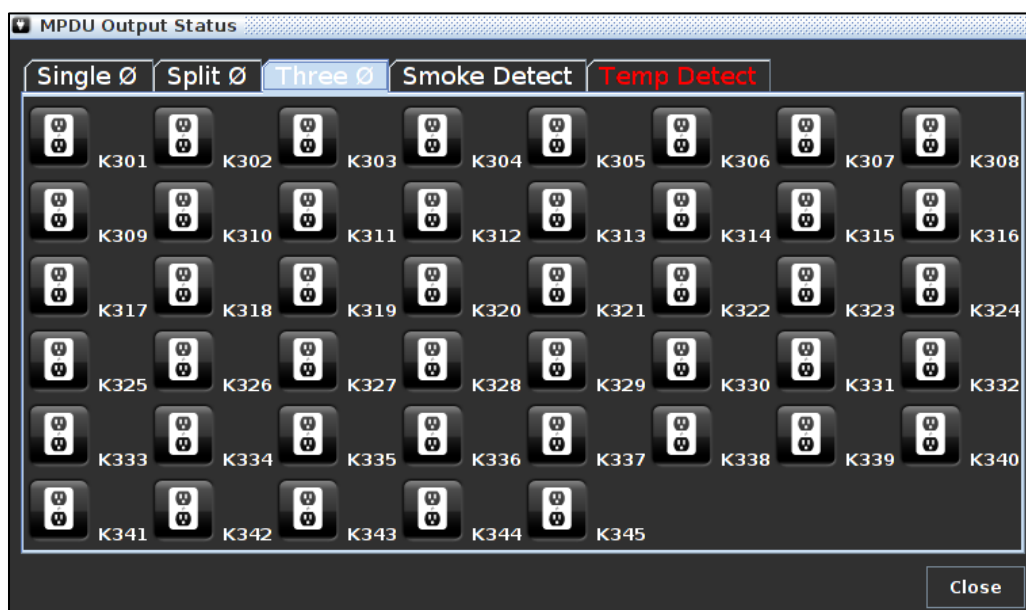
Relay Status

When the power relay is **closed**, the output icon will be *green*. 

When the power relay is **open**, the output icon will be unlit. 



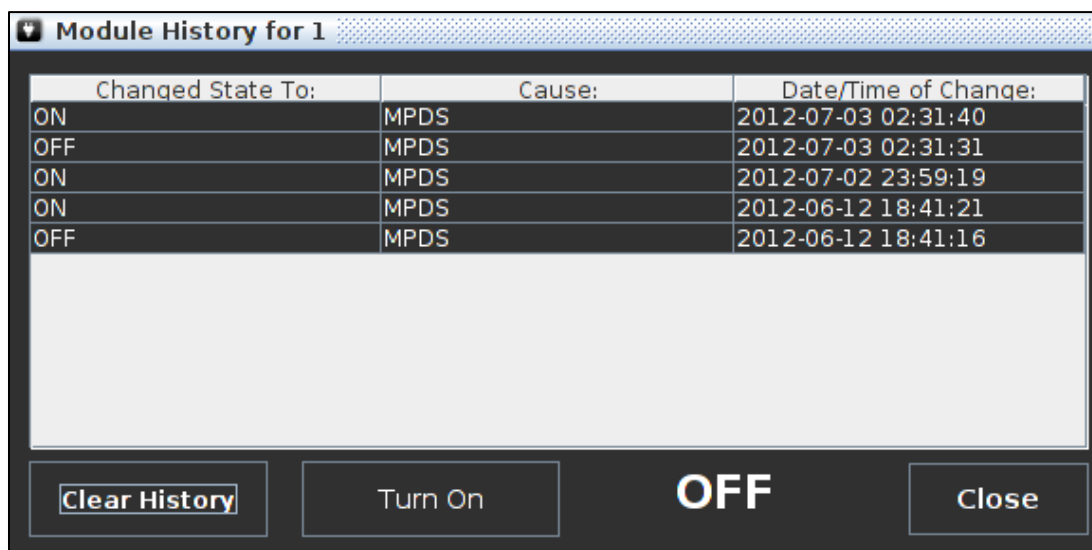
The Single phase tab. This tab displays the status of all single-phase power relays in the system.



The three phase tab, which displays the status of all three-phase power relays in the system.

Changing Port Settings

To view an individual power relay history or to switch a relay on or off, touch the icon for the port to view. The port history float panel will appear:



Clear Port History

1. Clear the port history by touching the *Clear History* button in the Port Settings and Options section of the float panel.
2. A prompt will appear verifying clearing the port history for the specified output. Touch the Yes button to clear the Port History.

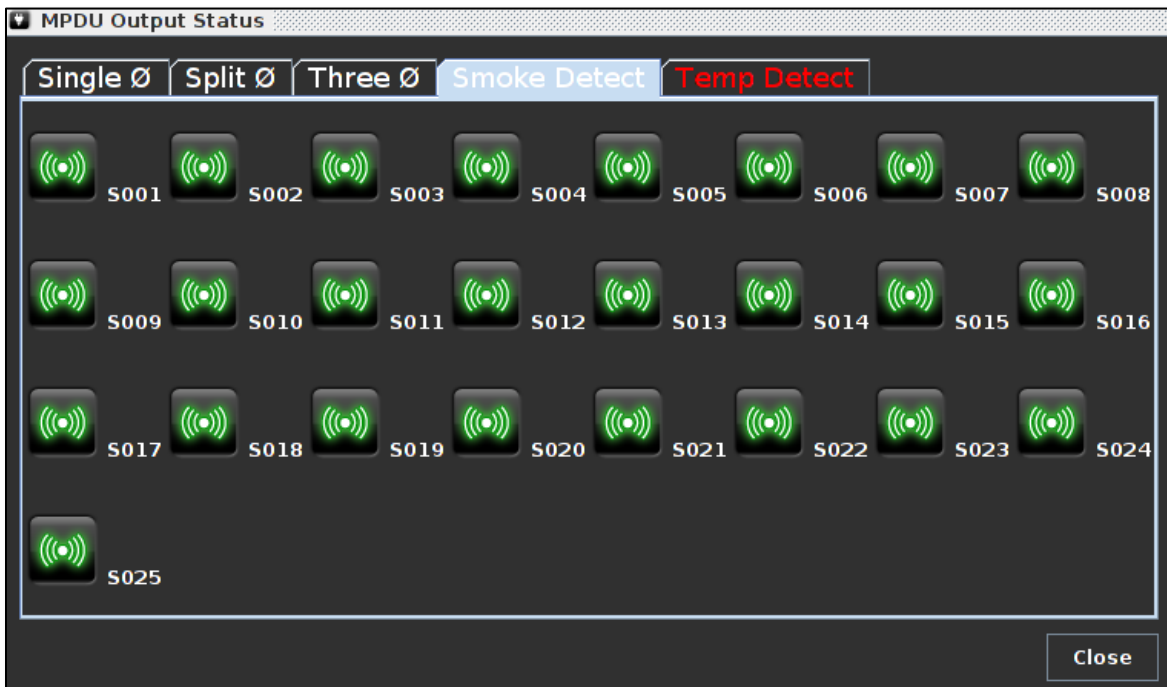
NOTE: It is necessary to close and re-open the Port History panel before changes can be viewed.

Switch ON/OFF

Touch the *Turn ON/OFF* button to turn the selected relay ON or OFF. This button is disabled if the user is not logged in as a supervisor.

Smoke Detection Status

1. When the Smoke Detection icon is red,  a fault has occurred. Immediate attention is required. Smoke Detection is latched until system has been reset and error cleared.
2. When the Smoke Detection icon is green,  no fault has occurred. No attention is needed.



Temperature Detection Status

- Over-temperature icons are located under “Temp Detect” and will turn red seconds before the EPO is triggered.



When the Temperature Detection icon is red, a fault has occurred. Immediate attention is required. Over-temperature signals are not latched and will clear when the condition is recovered.

To clear the warning, select the correct icon and choose “clear alarm.”



- When the Temperature Detection icon is green, no fault has occurred. No attention is needed.



Relay Event History

Each single-phase and three-phase power output keeps event history data.

Touch a single phase or three-phase power output icon to view the event history. The *Port History* float panel will appear.

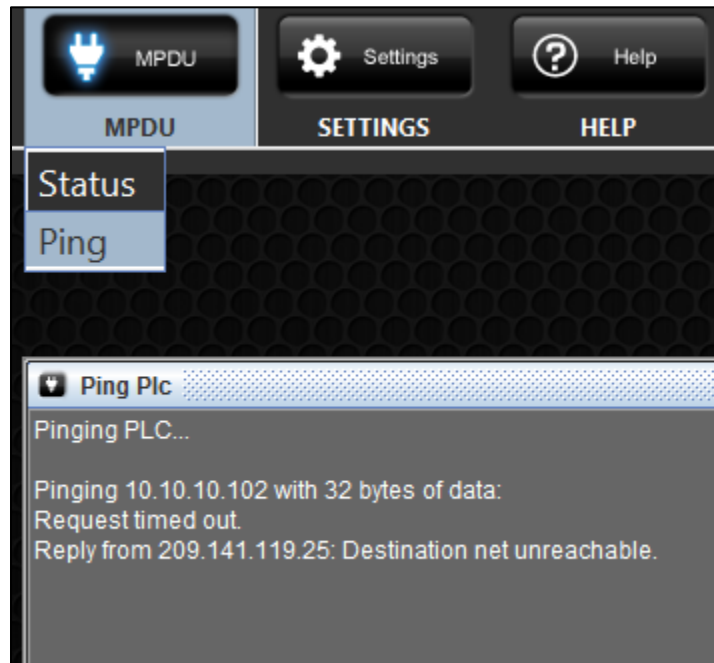
Module History for 1		
Changed State To:	Cause:	Date/Time of Change:
ON	MPDS	2012-07-03 02:31:40
OFF	MPDS	2012-07-03 02:31:31
ON	MPDS	2012-07-02 23:59:19
ON	MPDS	2012-06-12 18:41:21
OFF	MPDS	2012-06-12 18:41:16

OFF

Close

4.3—Ping Feature

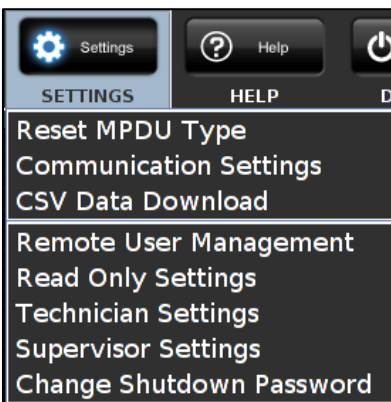
Access the *MPDU Ping* feature by touching *MPDU > Ping*. The application will verify that the computer has a valid ethernet connection to the MPDU. The ping results will appear in a pop-up window that can be closed once the information is obtained.



5—Setting Touchscreen Navigation

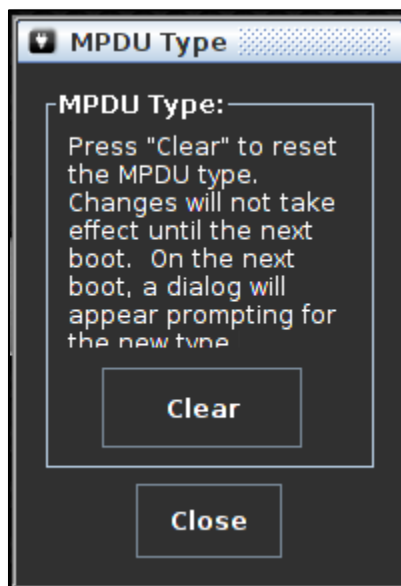
5.1—Setting Menu Item Overview

The Settings menu item button consists of eight drop down menu options that include: **Reset MPDU Type**, **Communication Settings**, **CSV Data Download**, **Remote User Management**, **Read Only Settings**, **Technician Settings**, **Supervisor Settings**, and **Change Shutdown Password**. Each drop down option will give the user different types of setting options for the MPDS™ system.



5.2—Reset MPDU Type

The Reset MPDU Type menu option makes it possible to change the MPDU type (TSSC, PTT, WTT, VMT, WST, OFT, MOBMS, UTD) the MPDS software is running. This option is only available to a Supervisor. The MPDU Type should always reflect the system the MPDS software is installed on.



To change the MPDU type, Click *Clear* and reboot the MPDS. When the MPDS software restarts, the user will be given an option to select which MPDU type to use for the system.

5.3—Communication Setting Feature

Access the *Communication Settings* float panel by touching *Settings > Communication Settings*.

Change Q-LS IP Address

1. In the *Communication Settings* float panel, touch the *IP Address* button in the Q-LS Settings section.
2. Type in the Q-LS TCP/IP address and touch the *Save* button. If an IP address is already populated, touch *Back* on the keyboard to clear it.

Change Q-LS System ID

1. In the *Communication Settings* float panel, touch the *System ID* button.
2. Type in the system ID for the Q-LS system. If an ID number is already populated, touch *Back* on the keyboard to clear it.

NOTE: The system ID can be found on the *Q-LS > Overview* float panel.

Change Q-LS Port

1. In the *Communication Settings* float panel, touch the *Port* button in the Q-LS Settings section.
2. Type in the TCP/IP port of the Q-LS system and touch the *Save* button. If a port number is already populated, touch *Back* on the keyboard to clear it.

Change Q-LS Data Record Rate (DRR)

1. In the *Communication Settings* float panel, touch the *DRR* button in the Q-LS Settings section.
2. Type in the DRR, in seconds, and touch the *Save* button. If a DRR rate is already populated, touch *Back* on the keyboard to clear it.

Change PLC IP Address

1. In the *Communication Settings* float panel, touch the *IP Address* button in the PDU Settings section.
2. Type in the PLC TCP/IP address and touch the *Save* button. If an IP address is already populated, touch *Back* on the keyboard to clear it.

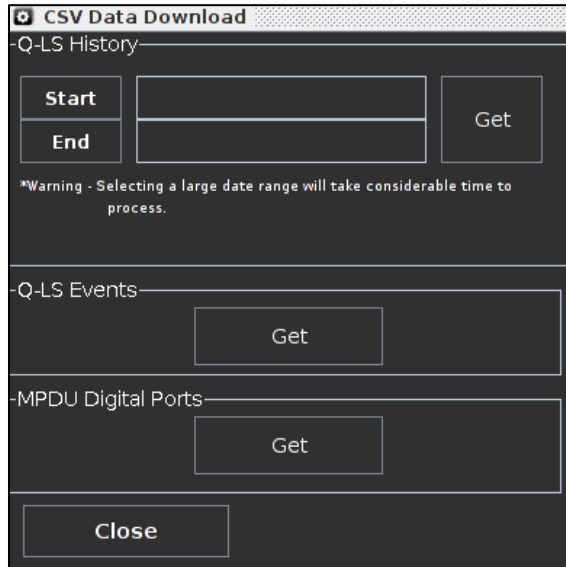
Change PLC Port

1. In the *Communication Settings* float panel, touch the *Port* button in the PDU Settings section.
2. Type in the TCP/IP port for the PLC and touch the *Save* button. If a port number is already populated, touch *Back* on the keyboard to clear it.

NOTE: Using the *Change IP* functions for the Q-LS or PLC is an effective method for resetting stalled communications to these devices.

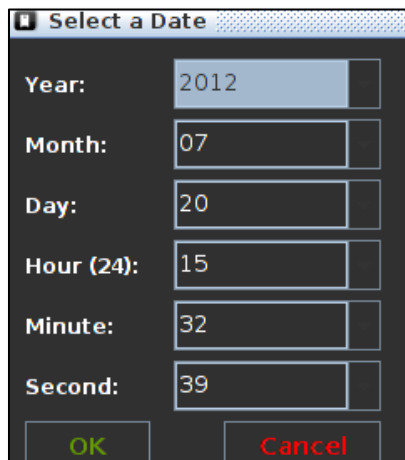
5.4—CSV Data Download Feature

The CSV Data Download feature allows the User to download specific MPDS™ history, events, and digital port information into a .CSV file. **NOTE: This feature is only available to the Technician and Supervisor.** Access the *CSV Data Download* float panel by touching *Settings > CSV Data Download*.

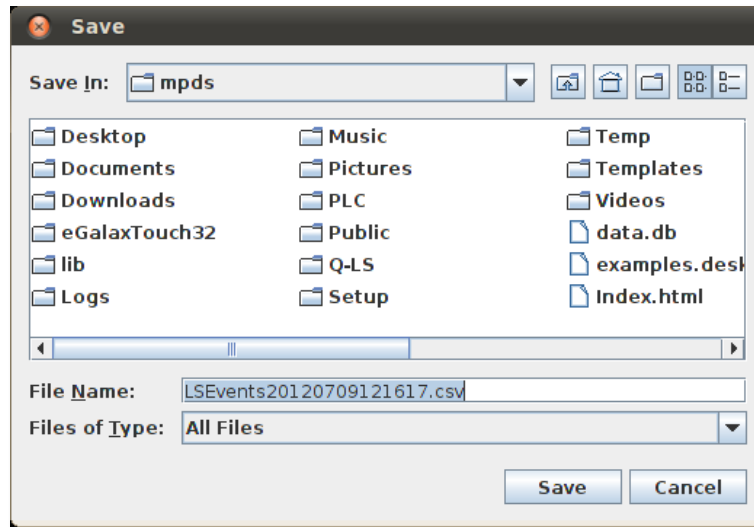


Retrieve Q-LS History Data

1. In the Q-LS History section of the CSV Data Download float panel, touch the Start and End buttons to set a data range.



2. Once the start and end dates have been selected, touch the Get button. A prompt will appear asking where to save the file.



3. Touch the folder for the removable drive to save the .CSV file to and touch the Save button.

Retrieve Q-LS Events Data

1. Touch the Get button in the Q-LS Events section of the CSV Data Download float panel.
2. When prompted, touch the folder for the removable drive to save the .CSV file to and touch the Save button.

Retrieve PDU Digital Ports Data

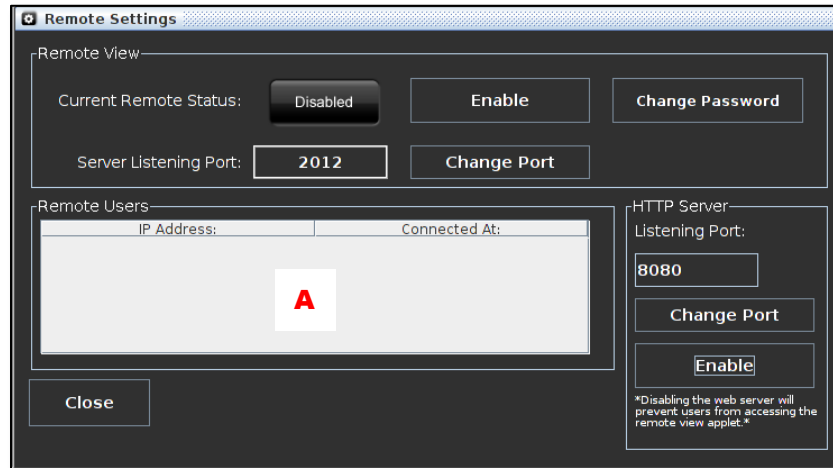
1. Touch the Get button in the PDU Digital Ports section of the CSV Data Download float panel.
2. When prompted, touch the folder on the removable drive to save the .CSV file to and touch the Save button.

5.5—Remote User Management Overview

The Remote User Management feature allows Remote Users to connect to the MPDS™ software system installed on the MPDU. While not all functionality will be available to the Remote User, the Remote User will be able to access the at-a-glance features giving status information on the MPDS™ system.

5.6—Remote User Management Features

Access the *Remote Settings* float panel by touching the *Remote User Management* drop down option. **NOTE: Only a logged in Supervisor can change Remote User settings.**



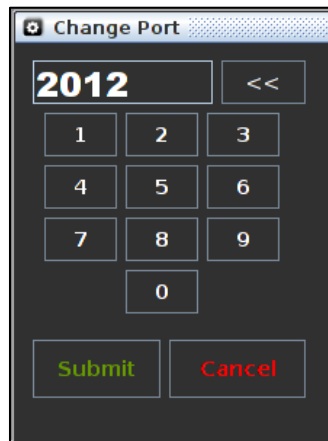
A. This section shows the Remote Users connected.

Enable / Disable Remote Use

1. In the Remote View section of the *Remote Settings* float panel, touch the *Enable / Disable* button. When remote access is **enabled**, the Current Remote Status icon will display the word “**Listening.**” When remote access is **disabled**, the Current Remote Status icon will display the word “**Disabled.**”

When Remote Users are **connected**, the Current Remote Status icon will display the word “**Connected.**”

2. Change the Server Listening Port by touching the *Change Port* button in the Remote View section of the float panel.



3. When the *Change Port* panel appears, type in the new port number and touch the *Submit* button.

Setting/Changing Remote View Password

1. In the Remote View section of the *Remote Settings* float panel, touch the *Change Password* button.
2. The change password prompt will appear. Type in the Remote View password and touch the *Submit* button to save the password.

5.6.1—HTTP Server Overview

The MPDU acts as an HTTP server to allow the MPDS™ software to be accessible to Remote Users. The HTTP server settings must be set and enabled to allow remote access functionality.

Enable/Disable HTTP Server

1. In the Web Server section of the *Remote Settings* float panel, touch the *Change Port* button.
2. Type in a port number for the web server and touch the *Submit* button. **NOTE: Port changing must be done while the HTTP server is disabled.**
3. Enable or disable the web server functionality by touching the *Enable/Disable* button.

5.7—Local User Management Features

The Local User Management feature consists of four drop down menu options that include: **Read Only**, **Technician**, **Supervisor**, and **Shutdown Password**. The four drop down menu options are used to change the User account passwords for the MPDS™ software.

Changing User Account Passwords

1. Change the User account passwords by touching the *Settings* feature. Local User accounts can be changed by touching one of the four drop down options under the *Local User Management* feature.
2. The *Prompt* float panel will appear. The timeout option is the only option that can be changed in the *Read Only* User account. All other accounts have a login password that can be changed.
3. Select the Technician or Supervisor User account in the drop down menu. Once touched, the prompt to change the timeout and password settings will appear.
4. To change the *Timeout* settings, touch the *UP* or *DN* buttons to raise or lower the time.

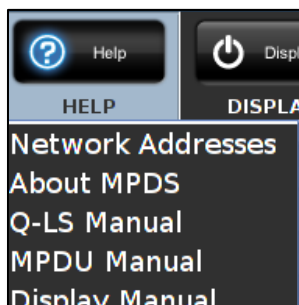
5. To change the password, type in the old password for the User account selected. Touch the *Submit* button.

6. Once the *Submit* button is touched, the *New Password* float panel will appear. Type in the new password and touch *Submit*.
7. Another prompt will require the new password to be typed in again. Once the new password has been typed in, touch the *Submit* button to set the new password.

6—Help Touchscreen Navigation

6.1—Help Menu Item Overview

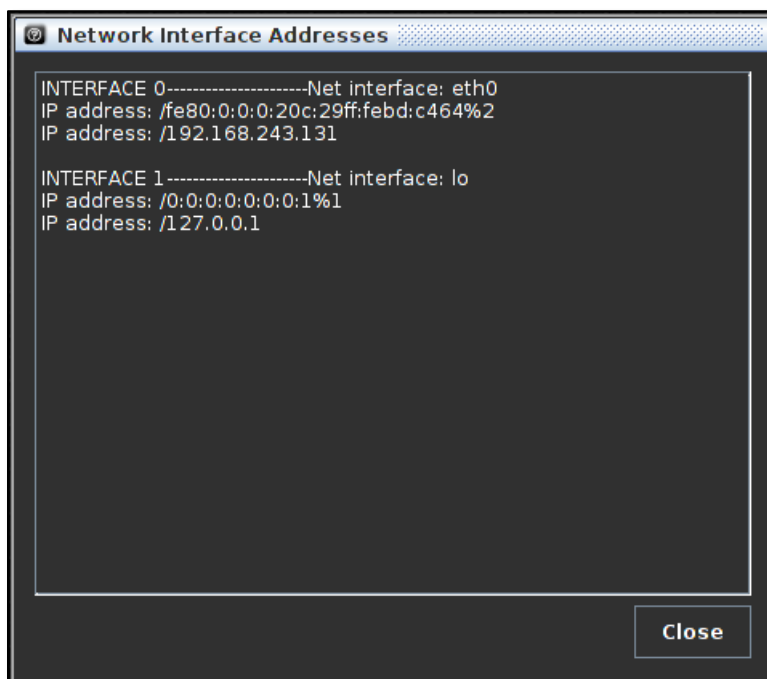
The *Help* menu item button consists of five drop down menu options that include: **Network Address**, **About MPDS**, **Q-LS Manual**, **MPDU Manual**, and **Display Manual**. Each *Manual* drop down option provides the ability to view different User Manuals that apply to the MPDS™ system.



View a User Manual by touching one of the drop down menu options. The selected User Manual will display within the main touch screen viewing area.

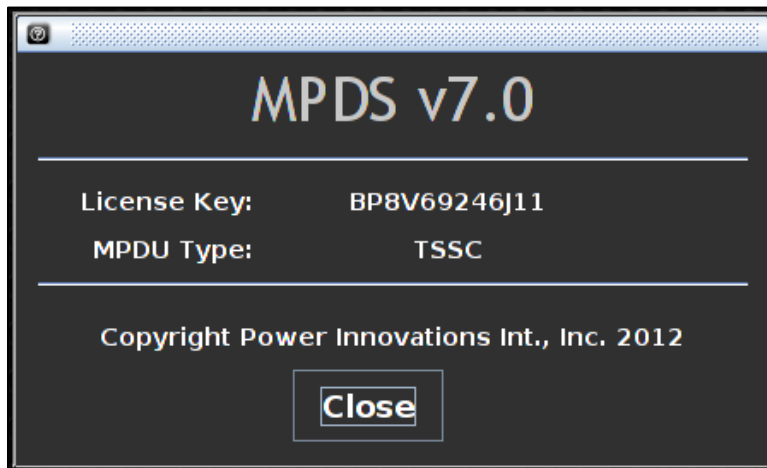
Network Address

The *Network Address* option displays the Ethernet configuration information for connecting to the MPDS remotely:



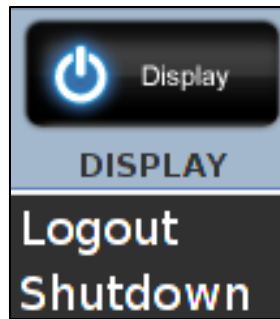
About MPDS

The *About MPDS* tab provides information about the MPDS software:



6.2—MPDS PC Display Shutdown

To shut down the PC display press down the Red Display button option.



Upon entering the Shutdown Password selection two options will be displayed:

- Logout (exit) the MPDS Software to the Linux desktop or
- Shut down the MPDS display

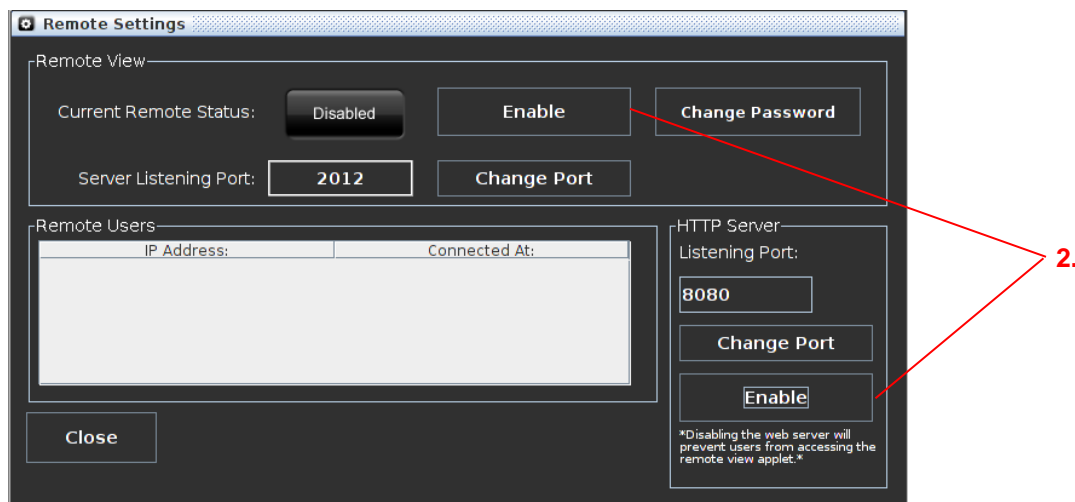
Note: Once the MPDS Screen has been shut down the MPDU logic control breaker must be cycled ON/OFF.

7—Remote Access Instructions

7.1—Enable Remote Access

Before the MPDS™ can be accessed remotely, remote access must be enabled through the touch screen MPDS™ software.

1. Access the *Remote Settings* float panel by touching the *Remote User Management* drop down option.

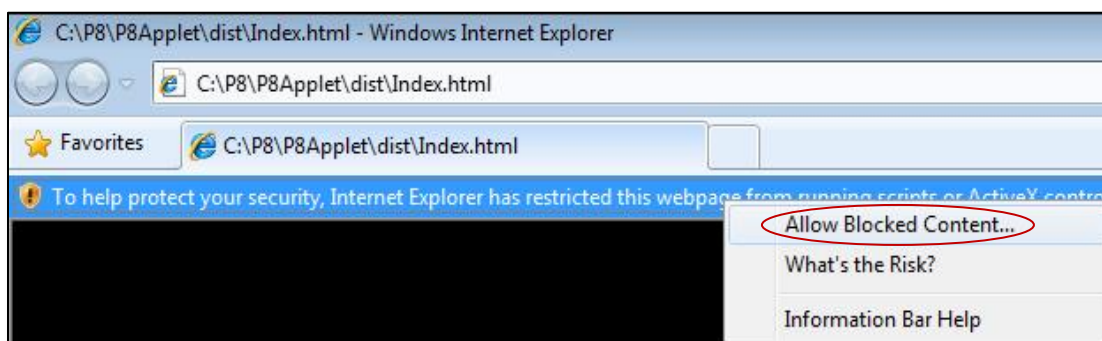


2. Touch both *Enable/Disable* buttons to enable remote access (**see above**).
3. Make note of the port number and IP address from the MPDU to access the remote view applet.

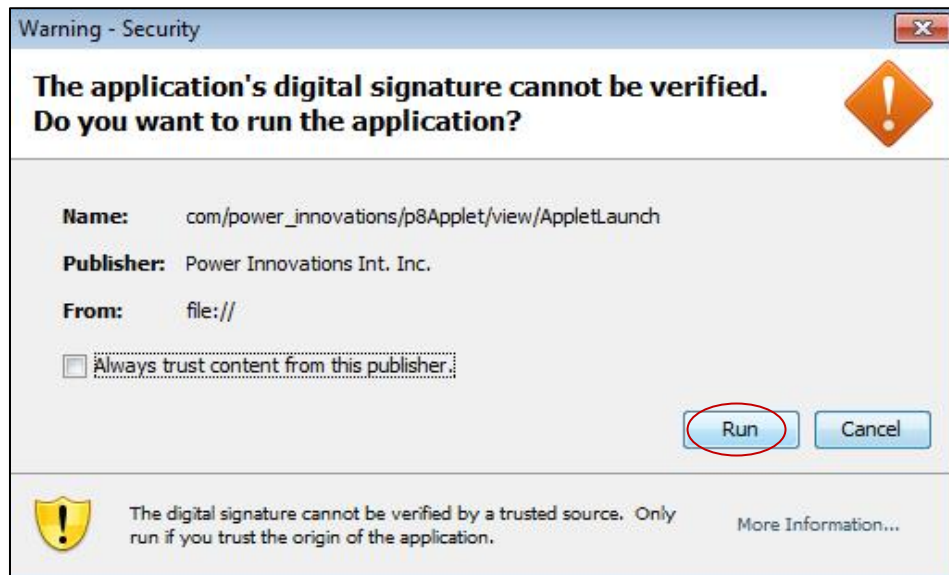
7.2—Remote View Applet

The *Remote View Applet* can be viewed in any web browser on a computer connected to the same local network as the MPDU. The Remote View Applet does not allow changing of settings within the MPDS™ touch screen software. All setting changes can be made only through using the MPDS™ touch screen software on the physical MPDU.

1. Open a web browser and type in one of the following URL addresses to connect to the MPDS™ system.
 - a. If the web server port is 80, type in the MPDU IP Address into the URL field of the web browser to connect to the *Remote View Applet*.
 - b. If the web server port is not 80, type ***http://[MPDUipaddress]:[MPDUport]*** into the URL field of the web browser. In the URL address, replace [MPDUipaddress] with the IP Address of the MPDU, and replace [MPDUport] with the server listening port number.
2. Once the URL address has been typed in correctly, a prompt may appear asking permission to run ActiveX control. Right click on this bar and select *Allow Blocked Content*.



3. The Remote View Applet will START and another prompt will appear on the screen asking for permission to run the applet. Select *Run* to start the Remote View Applet.



4. The Password Login Page will appear.

5. Type in the MPDU IP Address in the MPDS IP Address field.
6. Type in the Listening Server Port number into the MPDS Port field.
7. Type in the Remote Password, which can be set only through the touch screen MPDS™ software on the MPDU unit.
8. After filling out the Login Information, click *Launch* to start the Remote View Applet.

8—Troubleshooting

8.1—Troubleshooting Guide

1. **Symptom: No Q-LS data is displayed, or data is not updating. The Q-LS communication indicator in the MPDS tab of the Status/Warning/Fault menu is red.**
 - a. Cause: The MPDS software has lost communication with the Q-LS.
 - i. Solution: Verify the Q-LS is turned ON and the CAT5 cable between the Q-LS and the MPDU is still properly connected.
 - ii. After logging in as Supervisor, open the Communication Settings menu from the Settings drop-down menu. Select IP Address from the Q-LS section. Verify the IP Address and port are correct and press the Save button.
 - iii. Verify the system ID on the Q-LS display matches the ID setting in the MPDS Software.
2. **Symptom: No MPDU port data is displayed, or data is not updating properly. The PLC Communication indicator in the MPDS tab of the Status/Warning/Fault menu is red.**
 - a. Cause: The MPDS software has lost communication with the MPDU.
 - i. Solution: After logging in as Supervisor, open the Communication Settings menu from the Settings drop-down menu. Select IP Address from the Q-LS section. Verify the IP Address is correct and press the Save button.
3. **Symptom: A remote user cannot access the launch page for the MPDS Remote View Client.**
 - a. Verify: The MPDU is connected to the same local area network or is routable to the same local area network on which the user's computer is located.
 - b. Verify: The MPDU software is turned ON.
 - c. Verify: The remote User is typing the correct IP address of the MPDU into the URL field of their browser (The correct IP value can be found by clicking on Network Addresses under the help drop down menu).
 - d. Verify: After logging in as Supervisor, open the Remote Settings menu. Verify that the HTTP Server feature is enabled.
 - e. Verify: Also from the Remote Settings menu, make sure that the remote User is connecting to the correct port and that HTTP is specified as the protocol being used in the URL field (i.e. [HTTP://192.168.168.23:8080](http://192.168.168.23:8080)).
 - f. Verify: The HTTP server feature is broadcasting on a port above 1024.
4. **Symptom: The remote User is connecting to the HTTP server feature of the MPDS software, but the launch applet is not loading in the browser.**
 - a. Verify: The Java Applet security settings are set to at least "prompt".
 - b. Verify: The Java Applet security settings allow unsigned and unverified applets.
 - c. Verify: The User is not using any form of Mac OS X™. This version of the remote client applet is not compatible with the Java Virtual Machine (JVM) in Mac OS X™.
5. **Symptom: The remote User is attempting to connect to the MPDU using the remote client applet but cannot successfully log in.**
 - a. Verify: After logging in as Supervisor, open the Remote Settings menu. Verify that the Remote View feature is enabled.

- b. Verify: The correct IP address and port for the MPDU are being entered into the applet login screen. The port for the remote view service is different than the HTTP service port. The port can be verified in the Remote Settings menu.
- c. Verify: The correct password is being entered.

6. Symptom: The remote User has forgotten a password associated with the system.

- a. Solution: A lost password may be reset by a Supervisor.
- b. If a Supervisor has lost a password, reset service can be provided by Power Innovations upon authorization from Boeing.

7. Symptom: The battery indicator on the main screen is flashing, but the system is not running in backup mode.

- a. Cause: This indicates that the Q-LS has performed a battery test and that test failed. The battery indicator will continue to flash until the system is completely reset or a successful test has been run. Rectify the battery failure and run another test.

8. Symptom: The master alarm indicator on the main screen is illuminated.

- a. Solution: After logging in, click on the View button for a detailed view of what is causing the alarm.

9. Symptom: The PC has frozen or crashed and is non-responsive.

- a. Solution: Reset the PC:
 - i. *Systems commissioned before 1 September 2011* – Open the left side MPDU panel and reset the PC using the reset button beneath the PC display
 - ii. *Systems commissioned after 1 September 2011* – Press the reset button to the left of the PC screen on the front panel of the MPDU.

10. Symptom: The system is beeping.

- a. The system beeps for half a second every five seconds.
 - i. Cause: The system is drawing power from the battery.
- b. The system beeps twice every five seconds.
 - i. Cause: There is an Over-temperature condition
 - ii. Solution: See section 5.
- c. The system beeps thrice every five seconds.
 - i. Cause: Both an over-temperature has occurred and the system is running on battery backup.

9—Warranty



Note

For warranty information, please refer to the accompanying Q-LS manual, e.g. MNL120.

10—Contacting Power Innovations International

Customer Support

Questions concerning the operation, repair, or maintenance of this equipment should be directed to the Customer Support Department of PI. When making such an inquiry, please provide the model number, serial number, and detailed description of the issue. To service or repair any product, the customer must obtain Customer Support Ticket number from Customer Support.

Contacting Power Innovations

If there is any question or comment about this product, please feel free to contact us.

Power Innovations International, Inc.

Tel: (801) 785-4123

Fax: (801) 785-6999

Email: support@power-innovations.com

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