



SiteViewer© Web-based User Software Operation Instructions

The screenshot displays the SiteViewer web interface with the following components:

- Header:** PBT PHOENIX BROADBAND TECHNOLOGIES logo and SiteViewer Version 0.517.
- Navigation:** File, View, Resources, Setup, Help.
- Left Panel (Strings, Batteries, I/O Devices):**
 - Port 1: 'PBT Demo String #1': 40 bats, 554.6V, -1 mA
 - Port 2: 'String 2': 40 bats, 556.2V, -1 mA
 - #1; String 2, Jar 1: 13.891V, 1596S, 22C
 - #2; String 2, Jar 2: 15.984V, 1680S, 25C
 - #3; String 2, Jar 3: 13.453V, 1584S, 21C
 - #4; String 2, Jar 4: 8.922V, 930S, 82C
 - #5; String 2, Jar 5: 13.891V, 1584S, 22C
 - #6; String 2, Jar 6: 15.984V, 1680S, 23C
 - #7; String 2, Jar 7: 13.938V, 1584S, 22C
 - #8; String 2, Jar 8: 13.984V, 1590S, 21C
 - #9; String 2, Jar 9: 13.938V, 1590S, 22C
 - #10; String 2, Jar 10: 13.719V, 1572S, 20C
 - #11; String 2, Jar 11: 13.219V, 1584S, 22C
 - #12; String 2, Jar 12: 13.609V, 1572S, 22C
 - #13; String 2, Jar 13: 13.813V, 1578S, 23C
 - #14; String 2, Jar 14: 13.938V, 1584S, 22C
 - #15; String 2, Jar 15: 13.391V, 1590S, 24C
 - #16; String 2, Jar 16: 13.938V, 1590S, 22C
 - #17; String 2, Jar 17: 14.156V, 1596S, 23C
 - #18; String 2, Jar 18: 13.813V, 1584S, 23C
 - #19; String 2, Jar 19: 14.016V, 1590S, 21C
 - #20; String 2, Jar 20: 14.047V, 1590S, 23C
 - #21; String 2, Jar 21: 14.016V, 1590S, 23C
 - #22; String 2, Jar 22: 13.781V, 1584S, 22C
 - #23; String 2, Jar 23: 13.75V, 1578S, 397C
 - #24; String 2, Jar 24: 14.125V, 1590S, 23C
 - #25; String 2, Jar 25: 13.828V, 1584S, 23C
 - #26; String 2, Jar 26: 13.813V, 1584S, 22C
- Site Properties:**
 - Location: Default Site Location
 - Name: PBT-PA-SC4
 - Num. Installed Strings: 4
 - String Mode: Physical only
 - Site Controller Status: Normal
 - SC4 Temperature: 32 C / 90 F
 - SC4 Version: 00.15
 - MAC Address: 00:80:A3:9A:C4:CD
- App Controls:**
 - Auto-Poll
 - Chart Scanning
 - Dynamic Content
 - Popup Details
 - System Time: 07:28:20 9-14-2016
 - Cookies Enabled: Yes
 - Internet On-Line: Yes
- Charts:**
 - String 1 Battery Voltages (Bar chart showing Volts)
 - String 1 Battery Admittances (Bar chart showing Siemens)
 - String 1 Battery Temperatures (Bar chart showing deg C)



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Revision History

Release	Date	Revision Description
Rev 0.1	9/14/2016	New Document
Rev 0.2	9/15/2016	Edits
Rev 0.3	9/15/2016	Added icon descriptions

Disclaimer

SiteViewer is an alternative to the “Classic” web interface provided as standard equipment in Phoenix Broadband Technologies LLC (“PBT”) SC4 Site Control Unit (“SCU”) products. As such, it is and always will be a free, but developmental, product. PBT makes no representation as to the suitability, usability or completeness of SiteViewer. Development of SiteViewer will be an ongoing process driven by field experience and user feedback. PBT will offer SiteViewer upgrades as it sees fit, with no guarantee as to features, bug-fixes or release schedule for new versions. Installation of new versions of SiteViewer on customer’s SCU units is the customer’s responsibility. PBT accepts no responsibility for compensation to customer in the event SiteViewer malfunctions or is used improperly. As a free product, SiteViewer is used at the customer’s own risk.

Contact Information

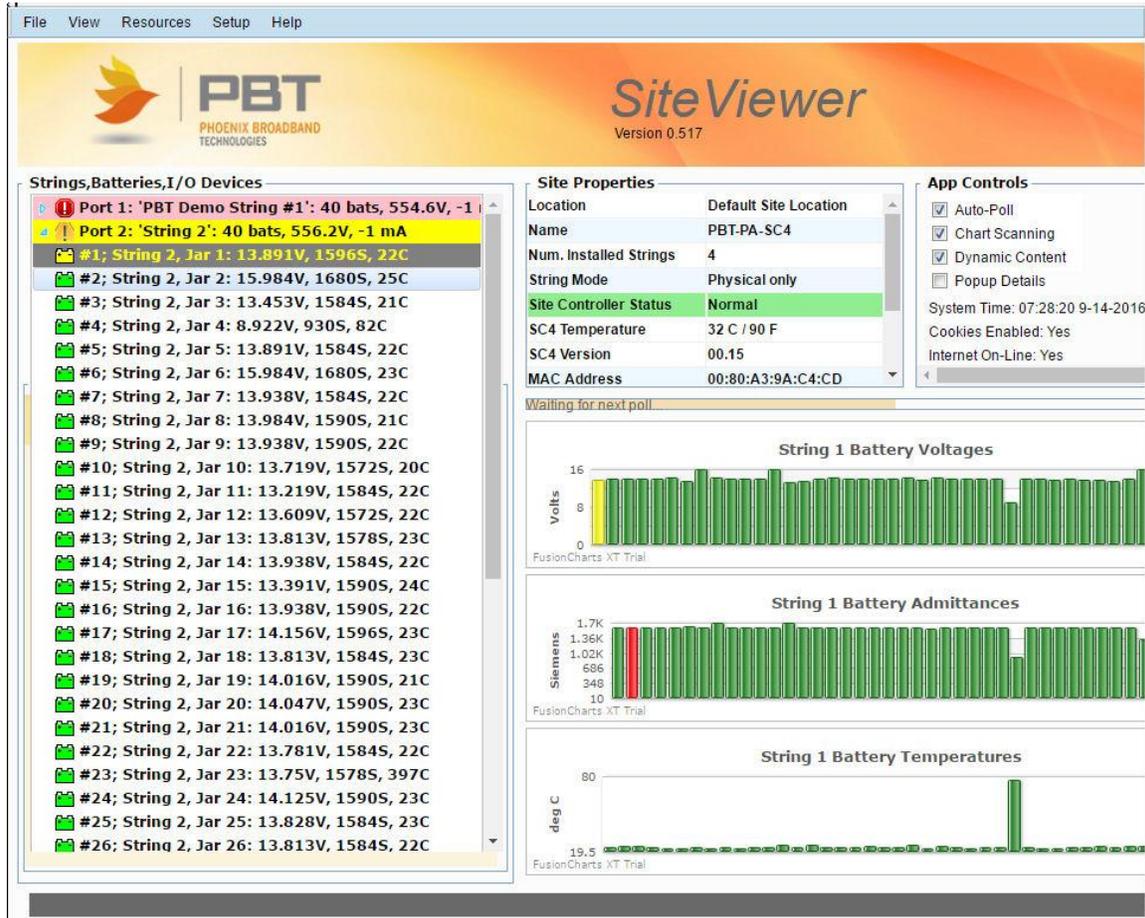
If you have any questions about the installation or use of the equipment described in this manual, contact Phoenix Broadband Technologies at (215) 997-6007 or email customerservice@phoenixbroadband.com.

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Overview

SiteViewer is a web-based viewer for information collected by the SC4 Site Control Unit. It is a feature-limited, view-only alternative to the “Classic” web interface. The “Classic” web interface provides complete capability to view and change all aspects of the SCU’s configuration and provisioning.



Unlike the Classic web interface, which requires Java to be installed on the user’s PC and certain UDP ports to be opened on the network, SiteViewer uses HTML5 “WebSockets” to provide a communications interface between the user’s PC and the SCU. This eliminates any special network configuration or requirement for any plug-ins on the user’s PC. HTML5 and WebSockets are also supported by many modern pocket and tablet devices.

SiteViewer is intended primarily as a “dashboard” to quickly view the operational status of a monitored site using an intuitive graphical paradigm. As such, it is mostly a read-only system, though limited capability is provided to assist in low-level setup of the SCU.



Starting SiteViewer

A session with SiteViewer begins by opening a compatible web browser (IE Ver 11 and above, Chrome Ver 53 and above are known to work properly). The IP address of the SCU is typed into the browser's URL field; i.e., "192.168.0.110". SiteViewer will be served by default unless "/Classic" is appended to the IP address, in which case the Classic web pages will be displayed. Example: "192.168.0.110/Classic".

The screenshot displays the SiteViewer web interface in a browser window. The address bar shows the URL "192.168.0.110". The page header includes the PBT logo and "SiteViewer Version 0.517".

Strings, Batteries, I/O Devices

- Port 1: 'PBT Demo String #1': 40
- Port 2: 'String 2': 40 bats, 556.4V
- Port 3: 'String 3': 40 bats, 555.5V
- Port 4: 'String 4': 40 bats, 559.6V
- Port 5: no string installed
- Port 6: no string installed
- P-BUS I/O Devices

String 1 Details

Name	PBT Demo String #1
String Type	UPS(HV)
Float Current	-1 mA
String Voltage	554.7 V
Voltage Delta	7140 mV
Logging Interval	Daily
Equalization Mode	Disabled
Summary Status	3

Site Properties

- Default Site Location: PBT-PA-SC4
- 4
- Physical only
- Normal
- 32 C / 90 F
- 00.15
- 00:80:A3:9A:C4:CD

App Controls

- Auto-Poll
- Chart Scanning
- Dynamic Content
- Popup Details
- System Time: 10:24:17 9-14-2016
- Cookies Enabled: Yes
- Internet On-Line: Yes

Important News; Updates Disabled

SiteViewer Update Info

May 20, 2016 - A new version of the application (Ver 1.1) is available as a desktop application. [Click here](#) to go page, where you'll find the files as well as installation instructions.

Please note that this is a standalone executable that runs on your computer. It is not an update to the version of SiteViewer that your browser loads from the site control unit. To upgrade the site controller version of SiteViewer, contact your monitoring system administrator.

String 3 Battery Voltages

String 3 Battery Admittances

String 3 Battery Temperatures

String 4 Battery 7 data received...

When SiteViewer starts, it should immediately display the SiteViewer graphic page and begin collecting data about the site and all the strings and batteries connected to the SCU. If there is no obvious sign of activity or data after the connection to the SCU is made, try refreshing the web page. If there is still no obvious sign that SiteViewer is collecting data, check for the correct IP address, verify network connectivity, and/or confirm that your PC has a compatible version of the web browser.



The SiteViewer Graphical Interface - Overview

The SiteViewer has 10 important screen elements:

Icons used in the SiteViewer Tree

Each branch in the SiteViewer tree has a color-coded icon that indicates the alarm status of the branch or its components:

-  String status – String and its batteries are all normal.
-  String status – Minor alarm with something on or within string.
-  String status – Major alarm with something on or within string.
-  Port status – No string connected to this port
-  Battery status – Battery normal
-  Battery status – Battery has minor alarm
-  Battery status – Battery has major alarm
-  Battery status – Battery has communications problem or is in process of making measurements.

The Menu Bar

The menu bar at the very top of the SiteViewer application (not to be confused with the browser's menu bar) contains drop-down lists of options that aren't part of the main graphical display.



The Logo Banner Pane

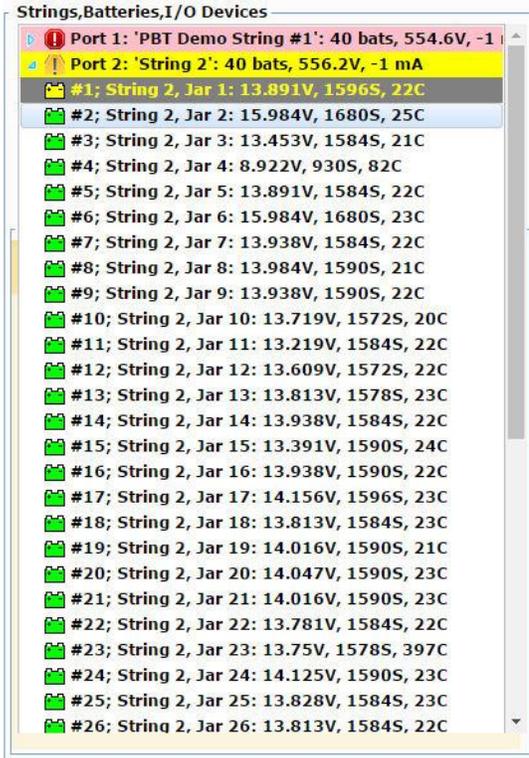
The SiteViewer logo banner contains the product logo, including a display of the version of SiteViewer currently loaded.





The System Tree Pane

The system tree contains a hierarchical display of all the strings, batteries and I/O devices connected to the SCU. Clicking on a tree branch toggles it folded or unfolded to display all the elements within that branch. Tree branches are color-coded and icon-coded with status information.





The Detailed Information Popup

The “Details” popup will appear when the mouse passes over a field for which more information is available. This feature can be disabled in the “App Controls” pane. If it is disabled, you can still get details by right-clicking on the element.

String 1 Details	
Name	PBT Demo String #1
String Type	UPS(HV)
Float Current	-1 mA
String Voltage	554.6 V
Voltage Delta	7140 mV
Logging Interval	Daily
Equalization Mode	Disabled
Summary Status	3

The Site Properties Pane

The “Site Properties” pane contains a listing of site information and status. This view can grow beyond the visible area of the pane, in which case the vertical scrollbar can be used to see additional information.

- Site Properties	
Location	Default Site Location
Name	PBT-PA-SC4
Num. Installed Strings	4
String Mode	Physical only
Site Controller Status	Normal
SC4 Temperature	32 C / 90 F
SC4 Version	00.15
MAC Address	00:80:A3:9A:C4:CD



The App Controls Pane

The “App Controls” pane contains options that can be selected to modify the operation of the app. It also contains information about the status of the app. Some controls are “persistent”, meaning their setting will be preserved even if SiteViewer is shut down and restarted.



Polling Progress Bar

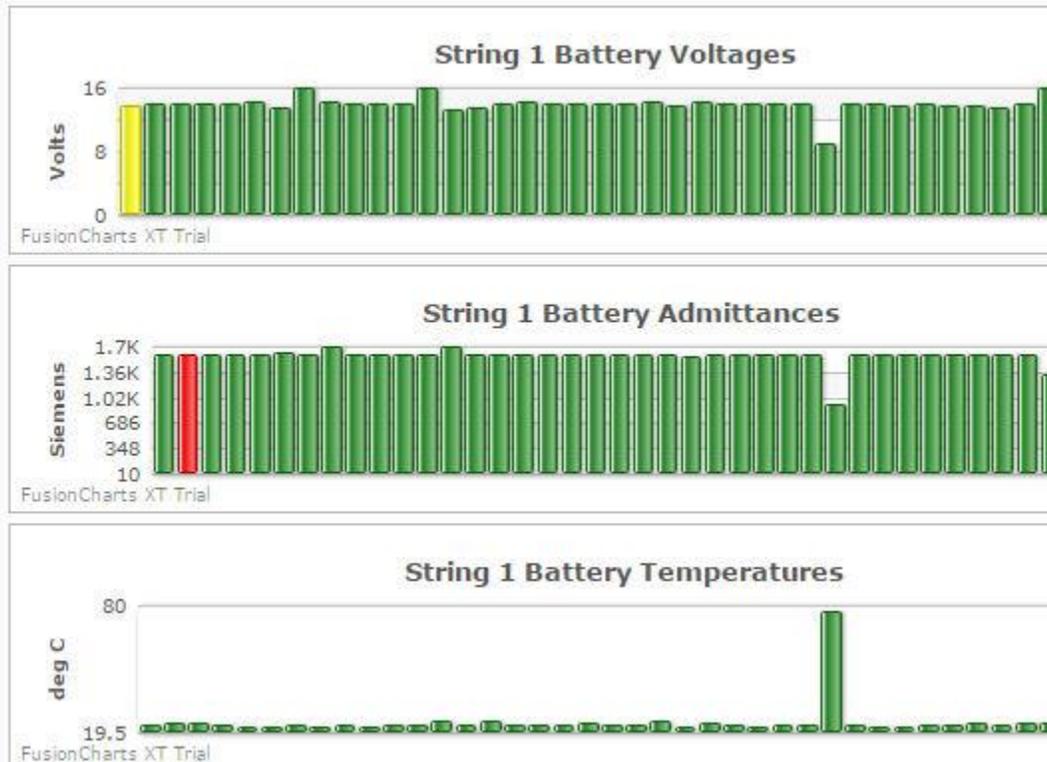
The polling progress bar indicates the progress of the present polling cycle. Each cycle consists of collecting data about the site as well as each string, battery and I/O device. The progress bar is green while polling and tan while waiting for the next poll cycle.





The Charting Area Pane

When no strings are open in the tree view, SiteViewer continually cycles through all the strings, graphing each one's battery voltages, admittances and temperatures. If a string is unfolded in the tree view, the graphs will only display that string. The graphs are color coded with status information, similar to the tree color coding.





The Dynamic Content Pane

If the user's PC has internet connectivity, this area will be continuously updated with information from PBT. This might include notification of new versions of SiteViewer, new product information and other information the user might be interested in. The dynamic update process can be disabled from the "App Controls" section of the page.

The screenshot shows a window titled "Important News; Updates Disabled" with a sub-header "SiteViewer Update Information". The main text reads: "May 20, 2016 - A new version of the SiteViewer application (Ver 1.1) is available as a standalone desktop application. [Click here](#) to go to the download page, where you'll find the files as well as installation instructions." Below this, a note states: "Please note that this is a standalone executable that runs on your computer. It is not an update to the version of SiteViewer that your browser loads from the site control unit. To upgrade the site controller version of SiteViewer, contact your monitoring system administrator." The window has a yellow background and a close button in the bottom right corner.

The Status Bar

The status bar at the bottom of the page displays detailed information about what the application is doing in real-time.





Detailed Description of the Screen Elements

The Menu Bar

- File Menu
 - Print Screen
 - Prints the presently viewed screen to the default printer. Best printed on a color printer.
 - Log Files
 - Displays the list of SCU log files. These are .csv files which are readable or viewable and graphable in any csv compatible spreadsheet program. Clicking on a file downloads it to your browser's "Downloads" folder.
 - Manuals, Drivers & Utilities
 - Displays a list of documents and utility programs stored on the SCU's flash drive. Clicking on an item downloads it to your browser's "Downloads" folder.
 - SiteViewer Manual
 - Opens a download dialog so you can save the SiteViewer manual to your PC
- View Menu
 - Classic Web Interface
 - Opens a new window that displays the SCU's Classic web pages. This requires certain ports to be open on your network as well as the Java plug-in on your computer.
- Resources Menu
 - This provides access to manuals and videos from the PBT web site. These will be the most up-to-date versions available. Requires internet access from your PC.
- Setup Menu
 - This is a password protected area that allows you to change the IP address of the SCU as well as other low-level networking settings. Contact your system administrator for access
- Help Menu
 - This provides contact information as well as the version of SiteViewer currently running.

The Tree View Pane

The tree view is a hierarchical display of strings, batteries and I/O devices attached to the SCU. Each branch of the tree is color-coded with status information. Clicking on a branch toggles its folded/unfolded status. If "Popup Details" are enabled in the "App Controls" pane, a popup Details pane will appear whenever the mouse cursor passes over a tree branch. If the popup is disabled, details can still be displayed by right-clicking on the tree branch.

The Site Properties Pane

This pane displays certain information about the site where the SCU is installed, SCU information and status information.



The App Controls Pane

- Auto-poll checkbox
 - If not checked, the polling process is suspended. This setting is persistent from session to session with the SCU in use.
- Chart Scanning checkbox
 - If not checked, the chart scanning process is suspended. This setting is persistent from session to session with the SCU in use.
- Dynamic Content checkbox
 - If not checked, the dynamic updating process is suspended. This setting is persistent from session to session with the SCU in use.
- Popup Details checkbox
 - If not checked, the popup details pane doesn't appear when the mouse cursor passes over an element. Details can still be obtained by right-clicking the element. This setting is not persistent from session to session.
- System Time Display
 - Indicates the time reported by the SCU. This is updated once per poll cycle.
- Cookies Enabled Display
 - Indicates whether cookie storage is enabled on the PC. If cookies are not enabled, persistent settings will not be persistent
- Internet On-Line Display
 - If internet connectivity is not available on the user's PC, Dynamic Content and on-line documents will not be available

The Progress Bar

If auto-polling is enabled, this bar will increment with green color as the unit polls the SCU for data. The bar decrements with a tan color during the waiting period between poll cycles.

The String Charting Pane

Voltage, admittance and temperature are charted for each battery in the string. If all strings in the tree view pane are folded up, the charts will cycle through the strings, displaying a different string each time through the poll cycle. Each bar in the bar chart is color coded with alarm information. Passing the mouse over a bar will display a small pop-up that displays the exact value of the bar's reading. Chart updating can be disabled from the App Controls pane.

The Dynamic Content Pane

If the user's PC has internet connectivity and if Dynamic Content is enabled in the App Controls pane, then this pane will be updated with new content every 30 seconds. Typical content will consist of firmware revision updates, new product information, general information, etc. This pane will disappear whenever the tree is unfolded to make room the longer tree content.

The Status Bar

Located at the bottom of the app, this provides real-time indications of what the app is doing.