

# C<sup>2</sup> Site Watch +

SiteWatch+ User Manual  
August 2021



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## 1. Contact Information

For inquiries, questions and information not covered in this user manual please use the contact information in this section for additional assistance from C<sup>2</sup> Systems.

### 1.1. Technical Support

Phone: (888) 677-2405

Email: [siteportal.support@csquaredsystems.com](mailto:siteportal.support@csquaredsystems.com)

### 1.2. Sales Support

Phone: (603) 644-2800

Email: [siteportal.sales@csquaredsystems.com](mailto:siteportal.sales@csquaredsystems.com)

## 2. Introduction

SiteWatch+™ is a high quality, high performance, cost-effective RTU. It offers remote monitoring, alarming and connectivity of legacy devices, environmental sensors and other passive devices at remote locations. The SiteWatch+ is a flexible solution for the management and security of remote sites. Each of its fully isolated digital inputs with individually programmable contact wetting voltage sources and support for both wet and dry contacts handle a wide range of contact closure monitoring needs while avoiding ground loops and other grounding problems that plague other devices.

SiteWatch+ supports modern networking technologies such as IPv6, SNMP including SNMPv3 and Northbound trap destinations for both IPv4 and IPv6 hosts, with an allowance of up to eight distinct destinations per IP version. SiteWatch+ also supports a user configurable dual-stack network interface allowing connectivity over both IPv4 and IPv6 simultaneously.

## 2.1. Safety notice

### WARNING - ELECTROCUTION RISK



**Please exercise caution! Never work on a system that is powered on! Working with electrical components in an improper fashion could cause permanent injury, property damage, DEATH, or any combination of these outcomes. Interaction with electrical components, devices, sensors, wires, etc. must be left to properly trained professionals only.**

## 2.2. Specifications



Figure 1: SiteWatch+ Module

PHYSICAL & ENVIRONMENTAL	
Dimensions	8" L x 4 3/8" W x 2 3/8" H
Weight	<1lb
Mounting	Din-Rail, Wall/Panel mount with screws
Enclosure Material	Poly-carbonate Resin, <u>UL</u> listed
Operational and Storage Temperature	-20° to 85°C (-4° to 185°F)
Humidity Range	10% to 90% RH Non-Condensing
Enclosure Rating	IP31
ANALOG INPUTS	
Quantity	2
Resolution	16-bit
Input Range	0-10V, 0-80V, 4-20mA current loop, (10KΩ) NTC Thermistor
Input Selection	Software controlled, per sensor
Protection	Lightning, Static
Offset	Gain/Offset settings for each input
Accuracy	±0.1%
Zero Drift	0.02 LSB/°C
Connector	RJ-45, 1 sensor per two pins
DIGITAL (CONTACT CLOSURE DETECTION) INPUTS	
Quantity	12
Isolated	Each has its own fully isolated supply for contact wetting voltage. Opto-isolated.
Range	+3VDC to +60VDC (for wet mode)
Input Mode	Dry Contact (open-collector), Wet Contact
Mode Selection	Software controlled, per sensor
Connector	RJ-45, 1 sensor per two pins
RELAY OUTPUT	
Quantity	2 relays: 5VDC up to 2W, 12VDC up to 2W
Rating	5A @ 125VAC or 1A @ 60VDC
Type	Form-C
Connector	Terminal Block
OUTPUT POWER	
5V Rating	2W
12V Rating	2W
INPUT POWER	
Range	+12 to +60 VDC
Reverse Polarity Protection	<u>Yes</u>
Power Supply	DC Isolated
Power Connection	Separate Ground Connection
Power Consumption	<800mw
ETHERNET	
Speed	10/100 Mbps
Port Types	RJ-45 and RS-232
Protocol	Modbus TCP
SERIAL INTERFACES	
Types	RS-485; RS-232
Protocol	Modbus RTU
SNMP	
Versions	v1, v2c, v3
Features	Sensors (config, control), alarm config, northbound traps

Figure 2: Specification Table

### 2.3. Sensor Connections

Your SiteWatch+ has various types of connections on it available for use. What follows outlines these connections and provides detail on their function.

#### Contact Closures

Your SiteWatch+ supports up to 12 isolated and individually grounded contact closures. Contact closures on SiteWatch+ are vastly improved from SiteWatch. Each contact closure is isolated from each other, eliminating the potential for ground loops across the different closures. Another improvement over SiteWatch is that each contact closure is individually grounded, where SiteWatch has several contact closures that share grounds; this problem is eliminated with SiteWatch+. Further, the selection of Wet or Dry contacts is achieved through software control, with no internal jumpers to set with SiteWatch+. For each contact closure, the wet/dry setting can individually be set versus just one setting for all contact closures as is the case for SiteWatch. Software control of these sensors is achieved through changing settings in the SitePortal® Properties Canvas, more details on this below in [Section 6.1.3](#).

Contact closures on SiteWatch+ are connected to via the RJ-45 I/O connections on the front. Any stripped Ethernet patch cable can be employed for this connection, so long as it is rated Cat5 or newer. On the patch cable, two wires indicate one contact closure, with positive and negative polarity for the one contact closure. Please utilize the below diagrams when wiring contact closure connections to SiteWatch+, and associated punch-down blocks (if required).

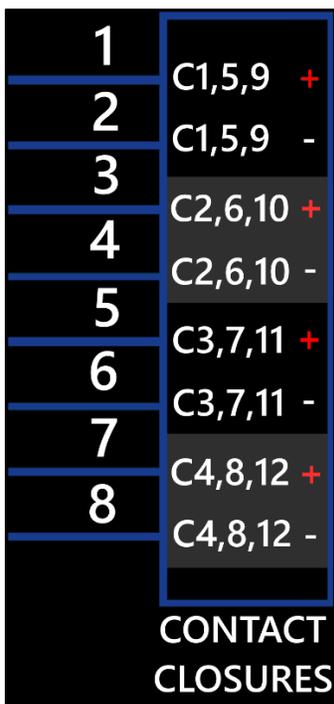


Figure 3: Sensor Block Positions

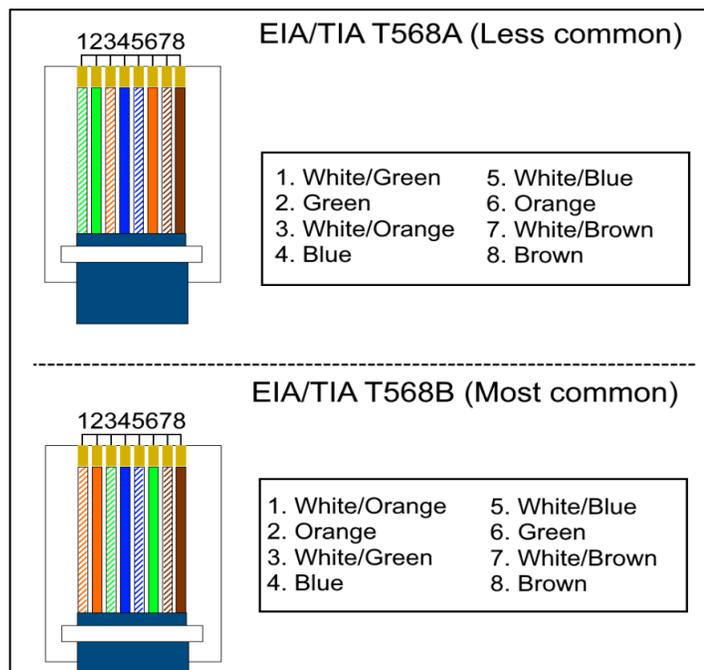


Figure 4: RJ-45 connector diagram

Images © 2021, C Squared Systems, LLC.

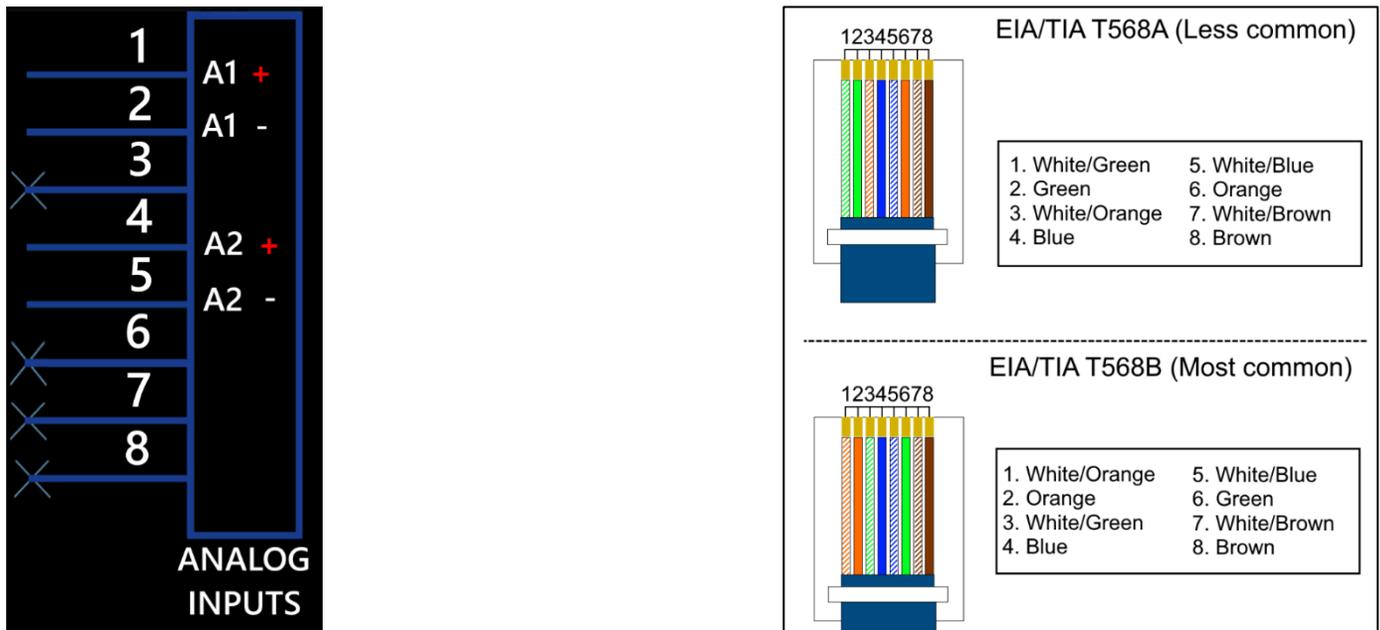
## Analog Sensors

Your SiteWatch+ supports up to 2 analog inputs. The analog inputs each are isolated from each other and each input is individually grounded. The analog inputs have several input modes, and these modes are changed via software, from the SitePortal® properties canvas, instead of SiteWatch's jumper implementation. See [Section 6.1.4](#) for more details on configuration.

Analog inputs on SiteWatch+ are connected to via the RJ-45 I/O connections on the front. Any stripped Ethernet patch cable can be employed for this connection, so long as it is rated Cat5 or newer. On the patch cable, Please refer to Figure 5 below when wiring analog input connections to SiteWatch+, and associated punch-down blocks (if required).

The following are supported modes with examples:

1. Voltage:
  - 0 - 10V
  - 0 - 60V
  - Example: Fuel sensors, power plant output monitoring, etc.
2. Current Loop:
  - 0 - 20 mA
  - Example: Certain fuel sensors, monitoring current for low power devices.
3. Thermistor:
  - Thermistor Fahrenheit
  - Thermistor Celsius
  - Supported sensor parameters:
    - Resistance: 10KΩ
    - Type: Negative Temperature Coefficient (NTC) thermistor.
    - B25/85 (commonly 'B-Value'): 3435K
  - Part recommendation:
    - Tewa Sensors, part number TT02-10KC8-T105-1500
      - Available for placement in your order upon request.



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**Figure 5: Analog Input and RJ-45 Connector Pinouts**

## Relay Outputs

Your SiteWatch+ has 2 type-C relays on-board, each of which support Normally Open (NC), Common (C) and Normally Closed inputs. Relays are connected to at the rear of the unit using traditional terminal block connectors. Your included C Squared Systems reversible screwdriver can be used to secure connections into these connectors. Endpoints can be connected as Normally Open (NO) or Normally Closed (NC). Common use-cases for relay outputs are connections to Generator start relays. Please refer to [Section 2](#) for information on relay limitations and to obtain information about acceptable loads.

Relays can be configured in the Properties canvas of SitePortal®, including settings for normal states, and the ability to change relay states (or flip the relay) from Inactive or Active.

## Power Outputs

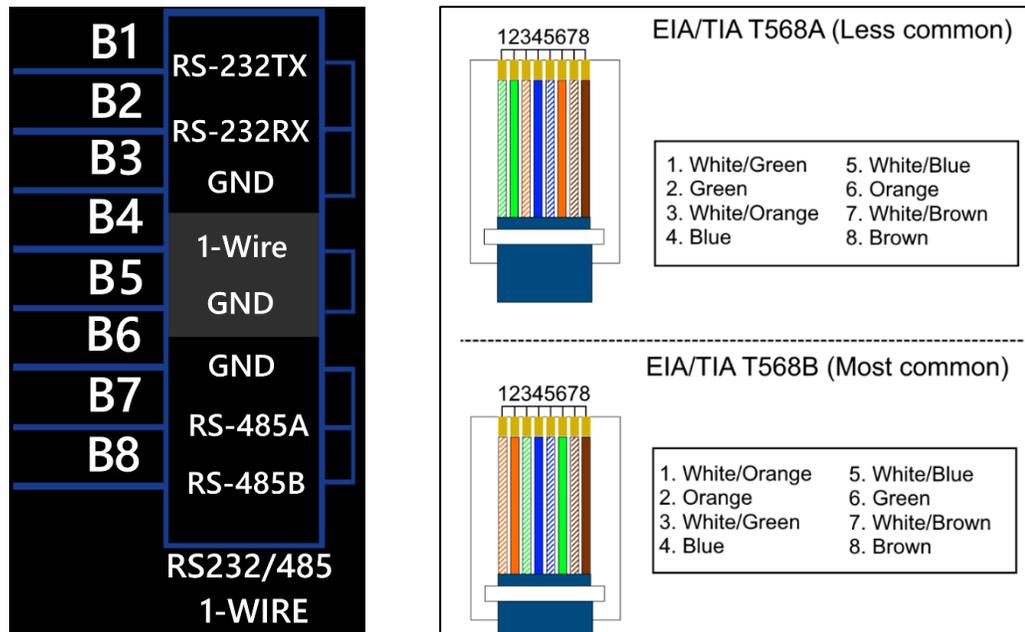
Your SiteWatch+ has two power outputs at the rear of the unit to drive low-power devices in the shelter, power sensors, etc. There is one 5VDC and one 12VDC output, each are connected to via traditional terminal block connectors. Please refer to [section 2.1 Specifications](#) for more details on output limitations.

## RS232, RS485, and 1-Wire

Your SiteWatch+ supports additional inputs that communicate via the RS-232, RS-485, or 1-Wire protocols. These inputs are connected to the appropriate RJ-45 jack on the front of the unit. The on-board Modbus gateway can be utilized to monitor attached devices for RS-232 and RS-485. There is currently no direct support to monitor these sensor types from SitePortal®

As of May, 2021, 1-Wire support is a work in progress feature, to later work with an in-development hardware addition known as SiteSense.

In the below example, 'B' signifies 'Bottom'. This means the bottom connector on the Ethernet/Serial shared connection port.



Images © 2021, C Squared Systems, LLC.

**Figure 6: RS232, RS485, 1-Wire Sensor and RJ-45 Connector Pinouts**

## 2.4. Front LED Descriptions

On the face of your SiteWatch+, there are four LEDs to communicate the status of the unit and give basic insight into alarms if you are looking at the device. The logic per LED is as follows:

1. Status LED (**Blue**)
  - 1.1. System heartbeat - blinks once per second under normal conditions
  - 1.2. Upon factory reset button being pressed:
    - 1.2.1. Solid for 5 seconds, blinks quickly when you can let go.
  - 1.3. Upon entering firmware update mode, blinks rapidly.
2. Alarm LED (**Red**)
  - 2.1. If there are no alarms, this LED is off.
  - 2.2. This LED will blink up to five times in quick succession with a two second pause in between each batch. Each blink indicates only one alarm.
  - 2.3. If there are more than five alarms raised, this LED will be on solid.
  - 2.4. For insight into the alarms, you must visit the alarms canvas of SitePortal®.
3. ETH SPEED (**Yellow**)
  - 3.1. Off for a 10Mbps connection
  - 3.2. On for a 100Mbps connection
4. ETH ACTIVITY (**Green**)
  - 4.1. Blinks where there is network activity over Ethernet.

## 2.5. Factory Reset Instructions

SiteWatch+ has a factory reset feature. The factory reset button is externally accessible through the left side of the case and could be pressed with a paper clip or other small, sturdy object.

**Please exercise caution when physically resetting your SiteWatch+, improper interaction could cause physical damage to the reset switch inside the SiteWatch+.**

### Factory Default Settings:

1. IP Address: 192.168.1.253
2. Subnet Mask: 255.255.255.0
3. Gateway: 192.168.1.254
4. IP Mode: IPv4 only
5. All SNMP trap settings will be reset; trap destinations will be removed.
6. All sensor thresholds and configurations set on the system will be reset to default values.
7. Previously enabled sensors **will** become disabled upon factory reset, requiring you to re-enable them.

### 3. Setting up SiteWatch+ for SitePortal®

#### 3.1. Introduction

SiteWatch+ communicates via SNMP. As such, it does not have its web-based user interface. Instead, to configure the network and SNMP settings on SiteWatch+, C Squared Systems provides a graphical application for Microsoft Windows machines. This application can be found in the Documentation section of your SitePortal environment. Housed under the SiteWatch+ folder, you will find a zip file called 'SiteWatch+-Config-Program.zip' available for you to download.

To download the Application from SitePortal®:

1. Login to SitePortal®.
2. In the Toolbar click **Documents**.
3. Locate the **SiteWatch+-Config-Program.zip** archive in the Document Explorer.
4. In the Documents area, click the **Download File** button in the **Action** column.
5. Save the file on your personal computer.
6. Unzip the file before launching the application.
7. No installation is required after extraction, simply run the included executable named **SiteWatchPlusUI.exe**

#### 3.2. Configuring your SiteWatch+ Network and SNMP Settings

- Connect an Ethernet cable from your computer to your SiteWatch+.
- Change your PC's Ethernet settings so your IP address is in the **192.168.1.0/24** subnet.
  - Recommended settings:
    - PC IP: **192.168.1.254**
    - PC Subnet Mask: **255.255.255.0**
    - PC Gateway: Leave blank or enter SiteWatch+'s default IP address of **192.168.1.254**
- Once your PC network has been set, enter in the default IP address into the configuration program, with **Port 9760**, and click connect.
- Once connected, you will be greeted with a tree structure representing the network and SNMP configuration parameters available to be set.

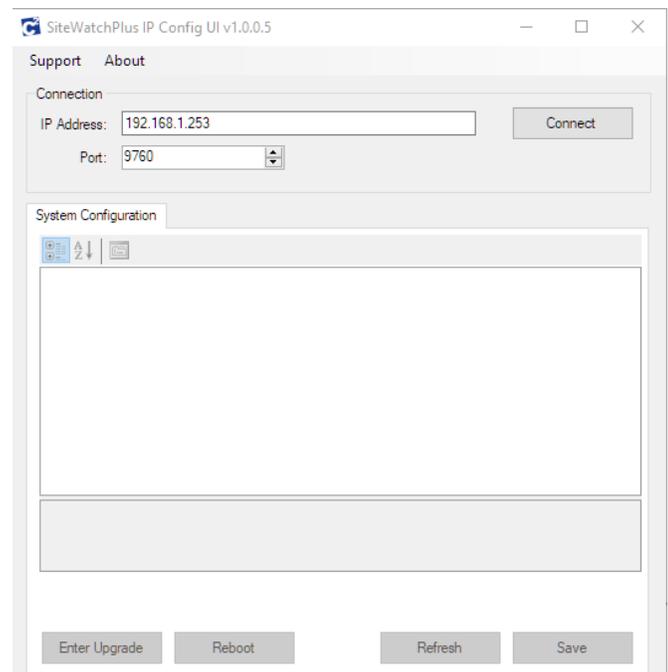
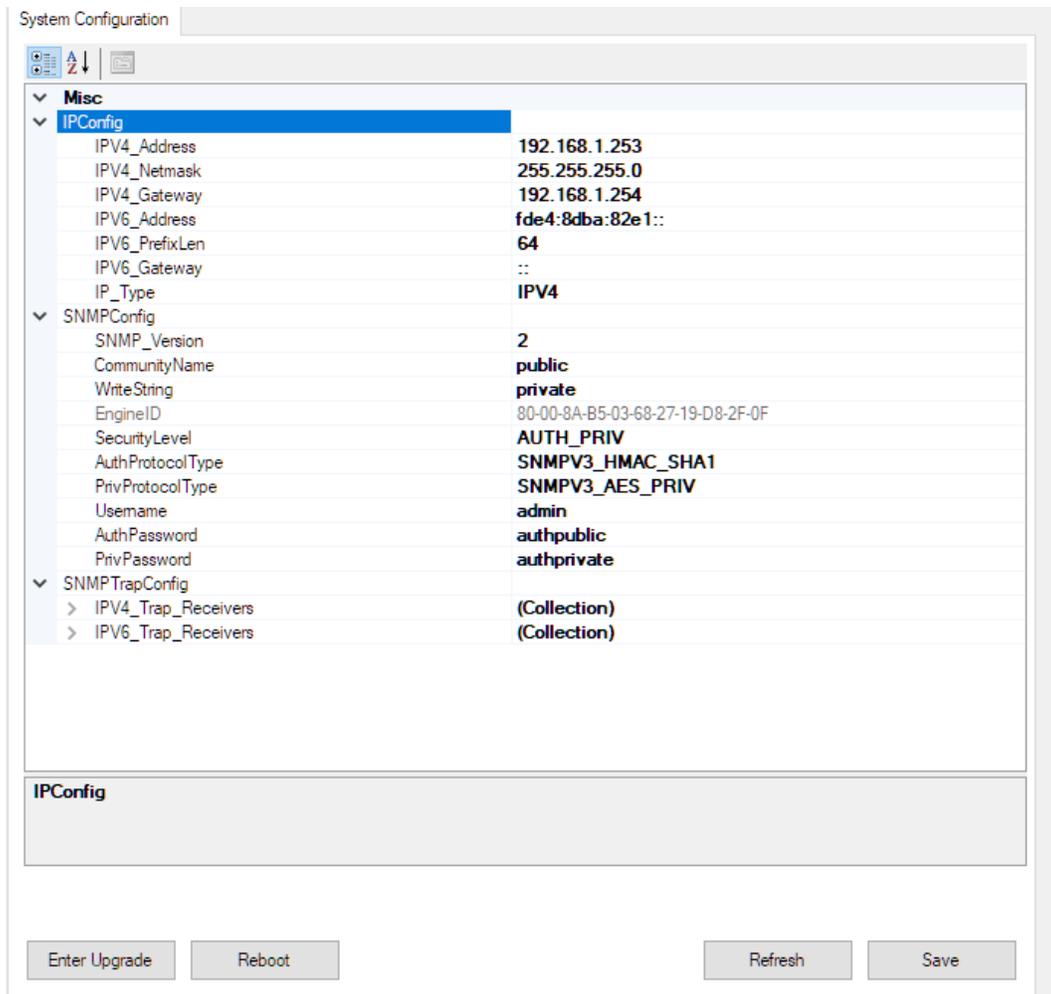


Figure 7: SiteWatch+ Configuration Program

- Upon entering in settings, click 'Save' to write the config to the SiteWatch+.
  - **Note:** a reboot of the system is required to apply any configuration changes. Utilize the 'Reboot' button at the bottom of the configuration program.



**Figure 8: SiteWatch+ Configuration Program displaying default parameters**

## 4. Mounting Instructions

Your SiteWatch+ can be mounted to a wall using the four (4) supplied screws using the screw holes on the corners of the base of the unit.

If you requested in your order to include DIN rail mounts, included with your SiteWatch+ is a two-piece DIN rail mounting kit and four pan-head screws. The mounting solution utilizes the middle eyelet of the wall mount ears on the case of the SiteWatch+.



Figure 9: DIN Rail kit

A recommended first step is to start a screw in the middle screw hole on the DIN rail mount ears. This makes it easy to place it into the middle eyelet of the wall mount ears and work with adding a second screw to firmly secure the mount in place. Work carefully and slowly to match up the DIN rail mounts on both sides of the case.

Following attachment of the mounts, the SiteWatch+ will be able to clip onto a DIN rail.

Step 1  
Drive screws into  
middle screw holes



Figure 10: DIN Rail kit install

Step 2  
Drive screws into  
either top or bottom  
screw holes to secure  
the mounts.



## 5. Building your SiteWatch+ into SitePortal®

The **Add Device** window allows users to add location and contact information when first integrating a device. Adding this information at integration instead of afterward saves time and immediately makes other key features in SitePortal® available to the user.

1. In the Network Tree, click the folder where you want to add your SiteWatch+.
2. Right Click on the folder and select **Add Device**. Search for device type 'SiteWatch+'. Fill in your SNMP access info and press 'Build & Scan Device'

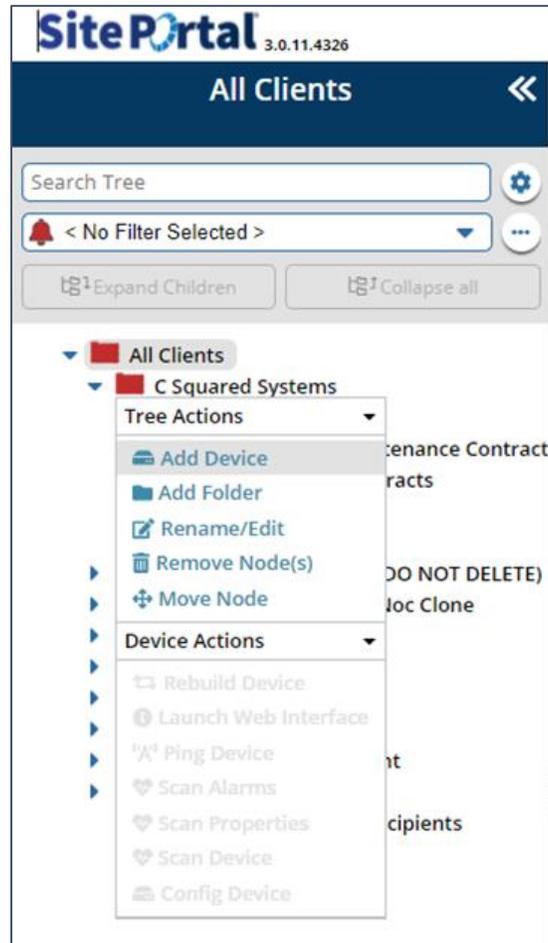


Figure 11: Add Device

The **Add Device** window will display. In the **Device Information** section enter the following information:

- a. Enter the device name into the **Device Name** field.
- b. Select "C Squared Systems – SiteWatch+" from the **Device Type** dropdown menu.
- c. Complete the fields for each tab in the Add Device window – Device Information, Location and Contact Info. *Leave Web UI Username/Password and SNMP settings blank.* Adjust your SNMP port as necessary.

- d. Once complete, select Create Device and your SiteWatch+ will be built into SitePortal® and available in the Network Tree

Service	From	To
SNMP	161	161

Figure 12: Add Device Window

Once you have built your SiteWatch in SitePortal®, the analog inputs, contact closures and relays will be available, but all will be disabled. An informational level alarm will be raised on all inputs of the SiteWatch; these alarms may be acknowledged. The inputs will be grayed out in the tree while disabled.

## 6. Using SiteWatch in SitePortal®

### 6.1. The Properties Canvas

#### Configuring SNMP Trap destinations

On the **main node** of your SiteWatch+ in the Properties canvas, you can set up to 8 SNMP trap destinations for both IPv4 and IPv6 destinations. Each trap destination has an option to enter a community string, and trap destinations are individually enabled in this canvas, per IP version.

Property	Value	New Value
SV ISO Power Control	OFF	<input type="text"/>
IPv4 Trap Community 1	public	<input type="text"/>
IPv4 Trap Community 2	None	<input type="text"/>
IPv4 Trap Community 3	None	<input type="text"/>
IPv4 Trap Community 4	None	<input type="text"/>
IPv4 Trap Community 5	None	<input type="text"/>
IPv4 Trap Community 6	None	<input type="text"/>
IPv4 Trap Community 7	None	<input type="text"/>
IPv4 Trap Community 8	None	<input type="text"/>
IPv4 Trap Enabled 1	YES	<input type="text"/>
IPv4 Trap Enabled 2	NO	<input type="text"/>
IPv4 Trap Enabled 3	NO	<input type="text"/>
IPv4 Trap Enabled 4	NO	<input type="text"/>
IPv4 Trap Enabled 5	NO	<input type="text"/>
IPv4 Trap Enabled 6	NO	<input type="text"/>
IPv4 Trap Enabled 7	NO	<input type="text"/>
IPv4 Trap Enabled 8	NO	<input type="text"/>
IPv4 Trap Receiver IP Address 1	192.168.11.214	<input type="text"/>
IPv4 Trap Receiver IP Address 2	None	<input type="text"/>
IPv4 Trap Receiver IP Address 3	None	<input type="text"/>
IPv4 Trap Receiver IP Address 4	None	<input type="text"/>
IPv4 Trap Receiver IP Address 5	None	<input type="text"/>
IPv4 Trap Receiver IP Address 6	None	<input type="text"/>
IPv4 Trap Receiver IP Address 7	None	<input type="text"/>
IPv4 Trap Receiver IP Address 8	None	<input type="text"/>
IPv6 Trap Community 1	None	<input type="text"/>

Figure 13: SiteWatch+ Node Properties Canvas - SNMP Trap Destinations

## Configuring SNMP Traps per Sensor

SiteWatch+ supports enabling or disabling sending traps upon alarm raise/clear events individually, per sensor. This setting can be accessed in the Properties canvas for each individual sensor.

Property	Value	New Value
Alarm Description	Analog Sensor Alarm	<input type="text"/>
Alarm High Severity	Major	<input type="text" value="Major"/>
Alarm High Threshold	70	<input type="text"/>
Alarm Low Severity	Major	<input type="text" value="Major"/>
Alarm Low Threshold	65	<input type="text"/>
Alarm Note	Analog sensor is in alarm state.	<input type="text"/>
Alarm Threshold Deadband	0.1	<input type="text"/>
Alarm Threshold Units	Raw	<input type="text" value="Raw"/>
Alarm Very High Severity	Critical	<input type="text" value="Critical"/>
Alarm Very High Threshold	79	<input type="text"/>
Alarm Very Low Severity	Critical	<input type="text" value="Critical"/>
Alarm Very Low Threshold	60	<input type="text"/>
Enable/Disable	Enable	<input type="text" value="Enable"/>
Gain	1	<input type="text"/>
Mode	Thermistor F	<input type="text" value="Thermistor F"/>
Offset	0	<input type="text"/>
Thermistor Mode	Fahrenheit	<input type="text"/>
Trap Enabled	YES	<input type="text" value="YES"/>

Figure 14: Per-sensor trap enabled property - Analog Input is shown

## Configuring Contact Closures

You can set up the contacts for the devices you are connecting to SiteWatch+. As an example, if you have two contact closures, such as a door open/close and a generator run contact, you can set them up to properly trigger alarms in SitePortal. Note: SitePortal is the only place you can configure these parameters for SiteWatch+.

### *Wet/Dry Contacts*

SiteWatch+ offers support for either Dry (open-collector) contacts or Wetted contacts individually for each contact closure on the system. To define these terms, a Dry contact, which is the most common type of contact closure, carries no voltage with it, therefore it is considered 'Dry'. By default, SiteWatch+ sets all contact closures to work in Dry mode, and this provides 5 Volts of DC power on each contact closure, thereby powering the contact closure you are connecting. Conversely, some contact closures carry power; these are considered to be 'Wet' or 'Wetted' contacts. Contact closures in 'Wet' mode provide no voltage to relevant attached sensors. Refer to your relevant documentation for the sensors you are connecting to verify which mode SiteWatch+ contact closures should be set as.

Property	Value	New Value
Enable/Disable	Enabled	<input type="text"/>
Mode	Dry	<input type="text"/>
Normal State	Open	<input type="text"/>
Trap Enable	YES	<input type="text"/>

Figure 15: Contact Closure Mode setting in the Properties Canvas

- For the first example of a door open/close contact, select the Contact Closure 1 in the Network Explorer as shown below:

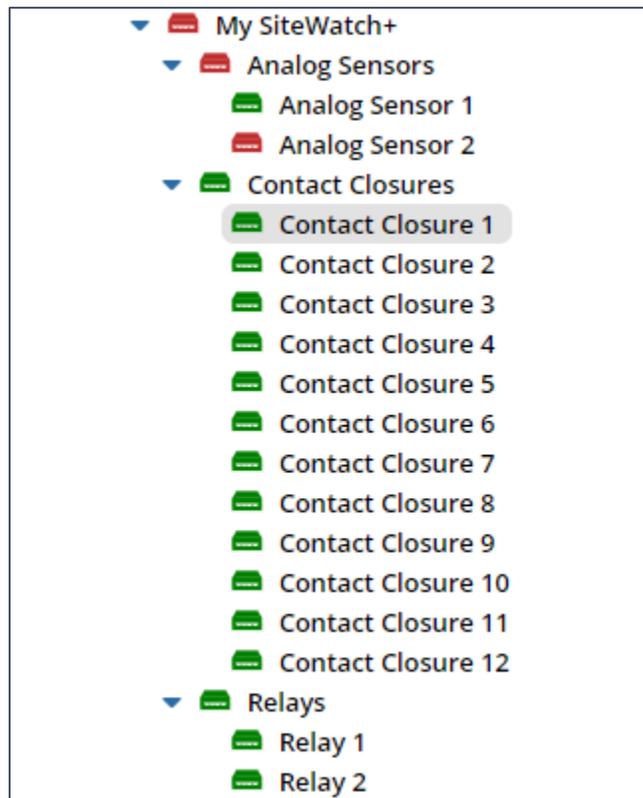


Figure 16: Selecting a Contact Closure in Network Explorer

Once Contact Closure 1 is selected, navigate to the Properties Panel by clicking the Properties Icon (Figure 25). The Properties Panel displays the properties and values associated with the node selected in the Network Tree.

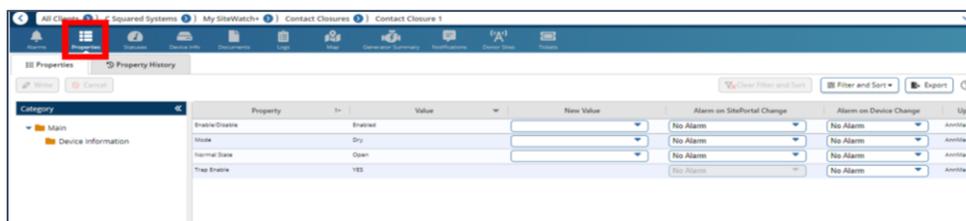


Figure 17: Properties Canvas

- To turn on your sensor, you must enable it from the Properties canvas. Click the “Disabled” drop-down in the New Value menu and set it to “Enabled”. Click save at the top of the canvas and **scan your SiteWatch**, your changes will not be seen until you scan. You will see the Contact in the tree is no longer grayed out.

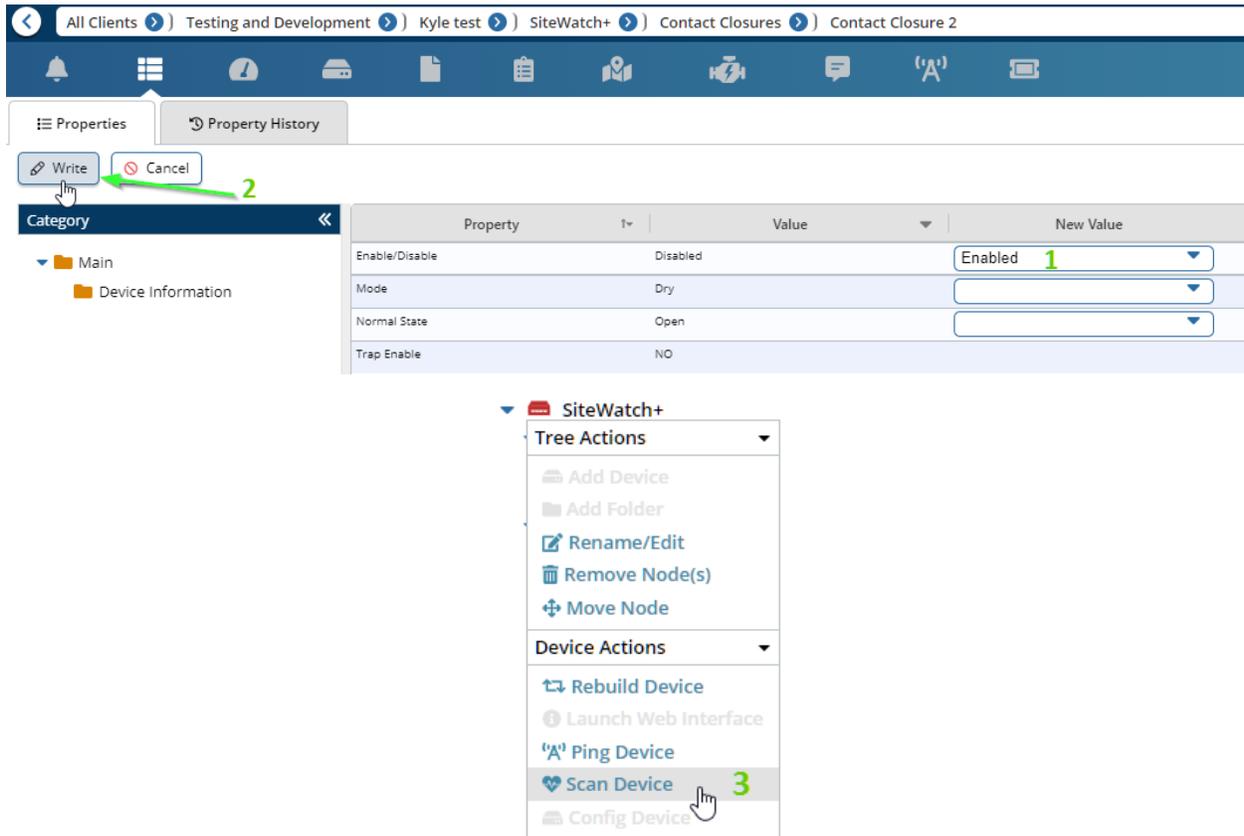


Figure 18: Enabling a Sensor

6. With the below Figure, for this example we will change:
  - a. The Alarm Description
  - b. The severity of the alarm we will receive
  - c. The Alarm State (when the contact is in this state, we will alarm)
  - d. The Contact Closure's name

Property	Value	New Value	Alarm on SitePortal Change	Alarm on Device Change	Update
Alarm Description	Contact Closure Alarm		No Alarm	No Alarm	
Alarm Note	Contact closure is in alarm state.		No Alarm	No Alarm	
Alarm Severity	Critical	Critical	No Alarm	No Alarm	
Enable/Disable	Disabled		No Alarm	No Alarm	
Mode	Dry		No Alarm	No Alarm	
Normal State	Closed		No Alarm	No Alarm	
Trap Enable	NO		No Alarm	No Alarm	

Figure 19: Setting Contact Closure Properties

7. Select the Alarm Severity for when the contact closure changes to open. In this example we have set the alarm to a Major alarm.
8. Click **Save Changes**.
9. For a device that you want to set to Normally Open, such as a generator run contact closure, follow the same steps and keep the Alarm State value set to Open.

ID	Device Name	Path	Description	Notes	ACK	Severity	Rules	Incident Time
36832633	Contact Closure 1	All Clients >> Testing and Development >> 5/18/2021 >> SiteWatch >> Contact Closures >> Contact Closure 1	Contact Closure Alarm			Critical		05/19/21, 01:51 PM

Figure 20: Example Contact Closure Alarm

## Configuring Analog Inputs

Setting up Analog Inputs is similar to that of Contact Closures. In the below example, we will set up a Thermistor.

1. Select your input in the Network Explorer

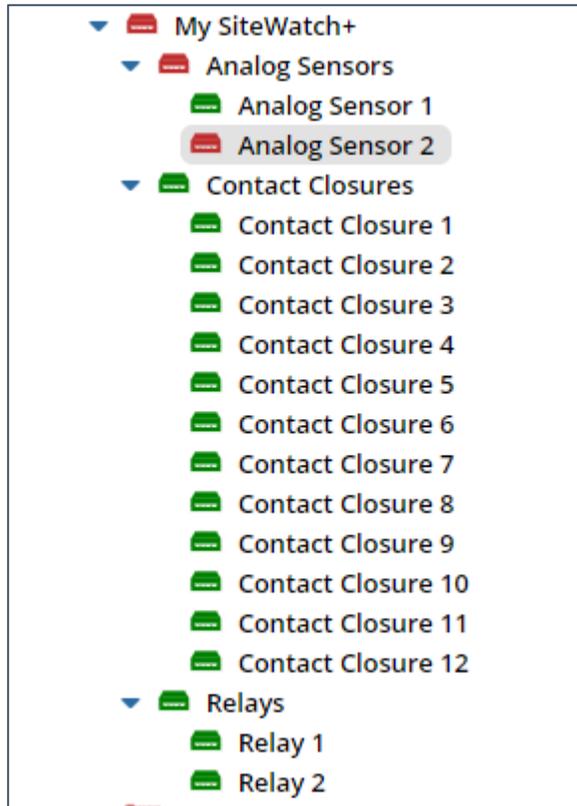


Figure 21: Disabled Analog Input in Network Explorer

2. Navigate to the Properties Canvas and enable the sensor. Save your changes and scan your SiteWatch.

Property	T=	Value	New Value
Alarm High Severity		Normal	<input type="text"/>
Alarm High Threshold		0	<input type="text"/>
Alarm Low Severity		Normal	<input type="text"/>
Alarm Low Threshold		0	<input type="text"/>
Alarm Threshold Deadband		0.1	<input type="text"/>
Alarm Threshold Units		Raw	<input type="text"/>
Alarm Very High Severity		Normal	<input type="text"/>
Alarm Very High Threshold		0	<input type="text"/>
Alarm Very Low Severity		Normal	<input type="text"/>
Alarm Very Low Threshold		0	<input type="text"/>
Enable/Disable		Disable	<input type="text"/>
Gain		1	<input type="text"/>
Mode		Sixty Volts	<input type="text"/>
Offset		0	<input type="text"/>
Trap Enabled		NO	<input type="text"/>

Figure 22: Enable Analog Input

3. In this example, we can set many parameters on how this device will alarm. For instance, say we want to alarm based on the following:
  - a. Set alarm Description to “Temperature event”
  - b. 68 Degrees - Raise Very Low Alarm as Critical
  - c. 72 Degrees - Raise Low Alarm as Major
  - d. 80 Degrees - Raise High Alarm as Major
  - e. 84 Degrees - Raise Very High Alarm as Critical
  - f. Note: with the above settings, our “normal” state range will be from 72 to 80 degrees. In this range, the input will not be in alarm.
  - g. Set input name to “Temperature”
  - h. Use Fahrenheit

When finished, save your changes and scan your SiteWatch.

Property	Value	New Value
Alarm High Severity	Normal	Major
Alarm High Threshold	0	80
Alarm Low Severity	Normal	Minor
Alarm Low Threshold	0	65
Alarm Threshold Deadband	0.1	
Alarm Threshold Units	Raw	
Alarm Very High Severity	Normal	Critical
Alarm Very High Threshold	0	85
Alarm Very Low Severity	Normal	Critical
Alarm Very Low Threshold	0	60
Enable/Disable	Disable	Enable
Gain	1	
Mode	Sixty Volts	Thermistor F
Offset	0	
Trap Enabled	NO	

Figure 23: Analog Input Properties Canvas

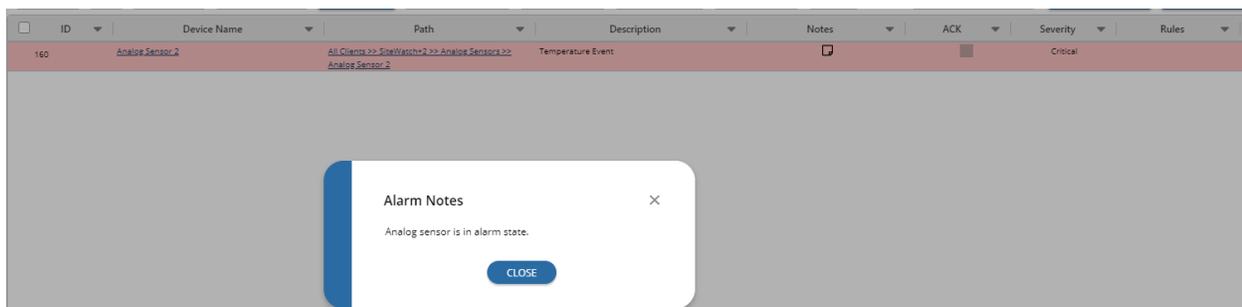


Figure 24: Example Analog Input alarm and Alarm Note

## Configuring Relays

Relays are set up in the same manner as Contact Closures or Analog inputs. In this example, Relay 1 is connected to a Generator Starter. Below we are setting the Alarm Description (as “Generator Starting”), the Alarm Severity (as Critical), and Relay Name (as “Generator Starter”). In this instance, when the Relay becomes Active, an alarm will raise.

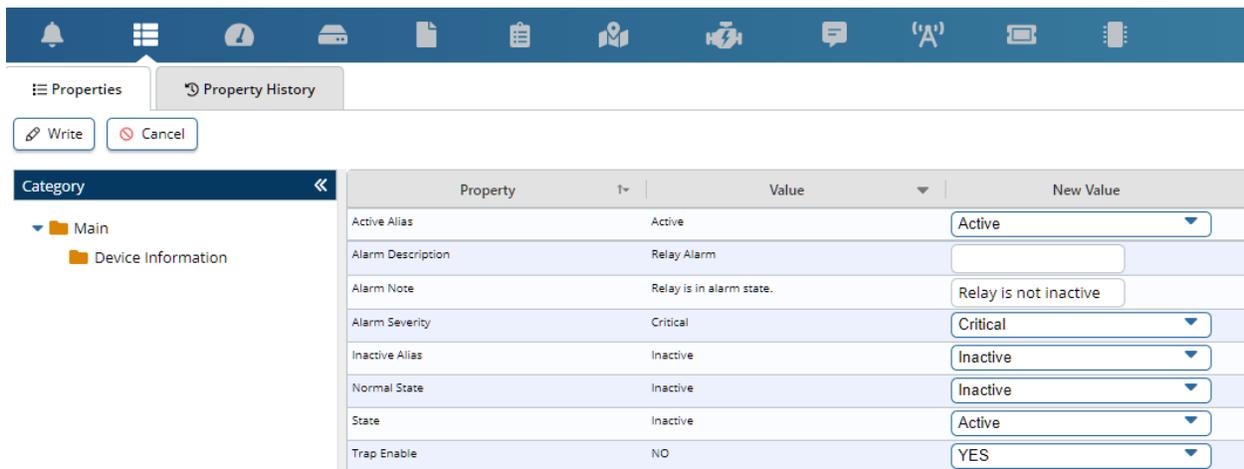


Figure 25: Configuring a Relay

## 6.2. The Status Canvas

The Status Canvas houses numerical values or True/False values for your SiteWatch’s inputs based on information gathered from the last scan.



Figure 26: Status Canvas in the Navigation Bar

### Analog Inputs

Analog Input Statuses shows you the “Status” or state of your sensor based on thresholds set in the Properties Canvas as well as the value of that Analog Input. In the below example, the value is a Temperature value with Fahrenheit for units.

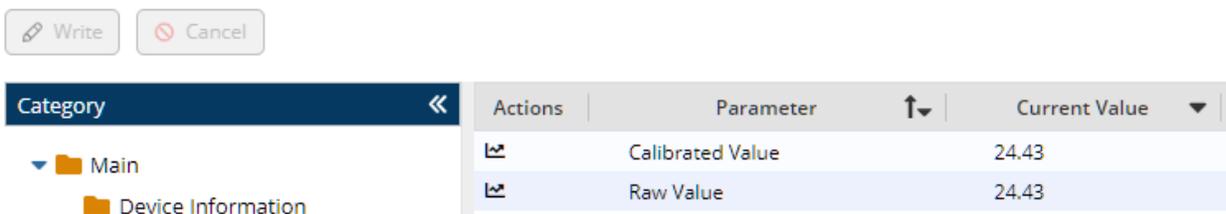


Figure 27: Analog Input Status example

### Contact Closures

Contact Closure Statuses provide you with the Open/Close status of the input as well as counters for how many times a contact has closed.



Figure 28: Contact Closure Status example

## Relays

Relay Statuses tell you if the relay is Active or Inactive.

Actions	Parameter	Current Value
	Status	Inactive

Figure 29: Relay Status example

### 6.3. Setting Scan Intervals

The scan interval of the SiteWatch+ can be modified in the Device Info Panel while the top level of the SiteWatch+ node is selected. To do this:

1. Navigate to the Top-Level node of your SiteWatch+ build
2. Navigate to the Device Info Panel
3. Select the Edit Button
4. Set “Scan Interval” as desired. The minimum and default value is 1 minute. You can also set the Retry Interval and Fail Threshold here.
5. When finished, click Save to keep the changes.

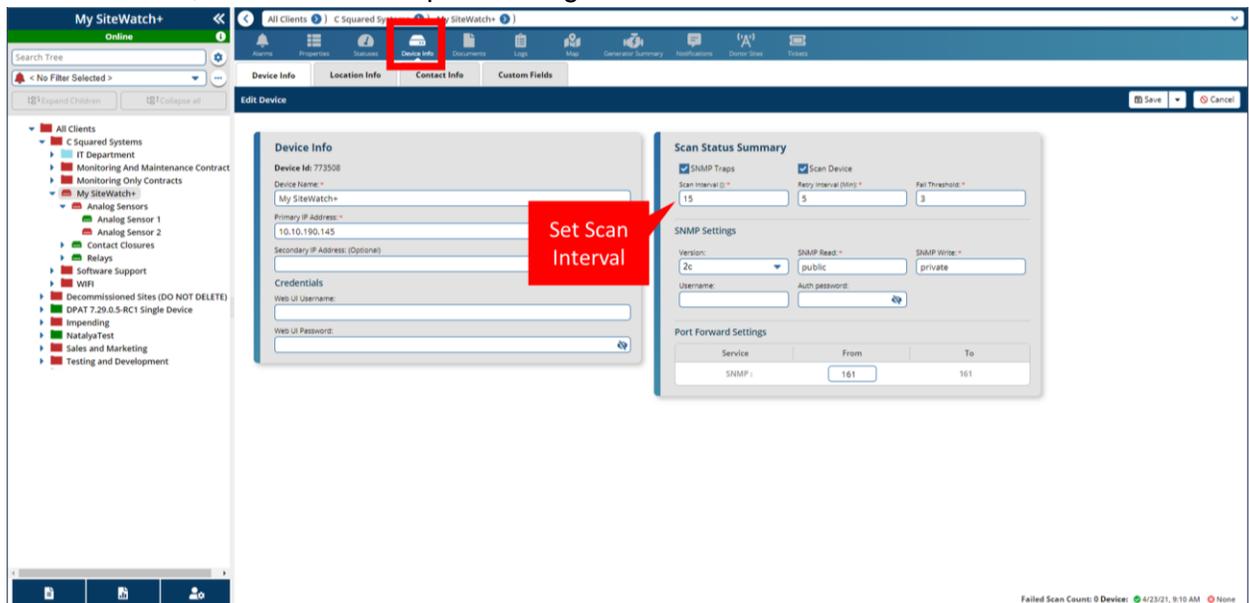


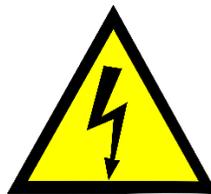
Figure 30: Setting Scan Intervals

## 7. Troubleshooting

### 7.1. My analog inputs are not reporting what I expect

- Check that your sensor is *enabled* from the SitePortal Properties canvas and that it is set to the correct unit. See [Section 6.1.4](#)
- Verify physical connection of your sensor(s) at punch-down blocks or other connection end points. Use of a multi-meter is recommended to verify impedance or voltages coming across wires of given sensors.
- Verify you are using the right wires that come out of your RJ-45 connector at the SiteWatch+. Refer to the pinouts in [Section 2.3](#)

### **WARNING - ELECTROCUTION RISK**



**Please exercise caution! NEVER work on a system that is powered on! Working with electrical components in an improper fashion could cause permanent injury, property damage, DEATH, or any combination of these outcomes. Interaction with electrical components, devices, sensors, wires, etc. must be left to properly trained professionals only.**

### 7.2. My inputs aren't alarming like they should be

- Ensure that relevant sensors are *enabled* from the SitePortal Properties canvas. See [Section 6.1.4](#)
- Verify that you have set up alarm thresholds (Analog) or normal states (Contacts or Relays) as you require.
- If the configuration is verified as correct, check physical connections of relevant sensors.
- If you are using SNMP trap alarming, ensure a proper forwarding address has been entered for the SiteWatch+ system, and that SNMP traps are enabled for relevant sensors. See [Section 6.1](#)

### 7.3. I forgot my network information and I can't access my SiteWatch+

- SiteWatch+ has a factory reset functionality that can be utilized with the built-in, externally accessible reset button on the unit. See [Section 2.5](#) for further information.

### 7.4. The alarm LED is blinking, what does this mean?

- This LED gives you a high-level notice of the amount of alarms raised on the system. See [Section 2.4](#) for further information.

## 7.5. I want to set up SNMP Traps for certain sensors

- From SitePortal®'s Properties canvas for individual sensors, you can set a sensor to raise a trap for a given sensor when alarms raise on it. On the SiteWatch+ main node, you can set SNMP trap destinations. See [Section 6.1.1](#) for further information.

## 8. Technician Notes