
User Manual

Autani CORE/Manager



Autani LLC

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1. CORE/Manager Overview

The Autani CORE/Manager appliance is a rugged, industrial control processor that is the heart of innovative integrated energy management systems powered by EnergyCenter® software. The CORE/Manager coordinates all energy management functions utilizing autaniNet wireless, wired Ethernet, and optional wired connectivity to third party systems to securely manage building functions.

The compact Autani CORE/Manager receives input from environmental sensors, local controls, and metering devices throughout a facility. Based upon sensor input, schedule, local input, curtailment, and event information, adjustments to lighting, HVAC, fans, and plug load devices are managed in real time to minimize energy waste and maximize savings.

The Autani CORE/Manager is a shared appliance designed for use with all of Autani's EnergyCenter® products.



The major features of the CORE/Manager are:

- ❑ Remote monitoring and control of lighting, HVAC, fans, and plug load devices.
- ❑ Metering and demand response.
- ❑ Sensor data collection, monitoring, and reporting.
- ❑ Optional connectivity to BACnet systems.
- ❑ Easy installation and commissioning: simply mount, connect, power, and go!
- ❑ Secure 2.4GHz wireless communication with other network devices via autaniNet.
- ❑ Comprehensive data storage and analytics provide for optimal energy use and savings.
- ❑ Scalable system can manage a single building up to an entire campus.
- ❑ Graphical view of real-time and historical energy use provides actionable information to users.

1.1. Specifications for CORE/Manager

AVAILABLE MODELS

- ☐ Mounting: Wall, Ceiling, or Table-top
- ☐ Storage: mSATA SSD
- ☐ Endpoint Capacity: ~120, additional endpoints can be added via Autani CORE/Manager add-ons
- ☐ Operating System: Secure Linux-based variant

POWER SUPPLY

- ☐ Voltage: 120VAC input / 12VDC output
- ☐ Power: 13 watts max.

I/O SUPPORT

- ☐ LAN: 1x10/100/1000 Ethernet, TCP/IP v4
- ☐ USB: 1 USB 2.0 and 1 USB 3.0 host interfaces

PROTOCOLS

- ☐ Wireless: 802.15.4 with mesh networking
- ☐ Ethernet: HTTP/HTTPS
- ☐ Security: Internal firewall, isolated wireless and internal processors
- ☐ UDP: 59370, 59371, 54261
TCP: 443
(required for remote access, outbound secured VPN connection).

RADIO NETWORK (autaniNet)

- ☐ IEEE 802.15.4-2003 2.4GHz ISM
- ☐ Range: Up to 1500' LOS transmit/receive

ENVIRONMENT

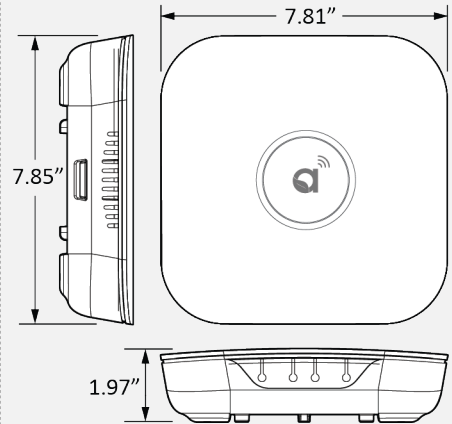
- ☐ Operating Temperature: 10° to 40° C
- ☐ Storage Temperature: -25° to 65° C

RECOMMENDED WEB BROWSERS

- ☐ Google Chrome
- ☐ Mozilla Firefox

PHYSICAL

- ☐ Dimensions (HxWxD): 7.85"x7.81"x1.97"
- ☐ Color: Autani White/Black
- ☐ Weight: 1.6 lbs (0.7 kg)



INFORMATION LABELS

Located inside the device; remove the top cover to see.



1.2. Package Contents

- ☐ Autani CORE/Manager
- ☐ Wall Plate
- ☐ Back Plate
- ☐ 12V Power Supply
- ☐ 10' Ethernet Cable
- ☐ Mounting Screws
- ☐ Documents: User Manual, License Key sheet

1.3. Regulatory Information

CORE/Manager, this device contains:

- FCC ID: V8NZRB1000152
- IC: 7737A-ZRB1000152

15.105 statement (for digital devices)

NOTE: *This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:*

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer or an experienced radio/TV technician for help.*

1.4. Product Warranty

3 year limited warranty from Autani. For further information, please refer to terms and condition on www.autani.com.

□ **Autani Support.**

Phone: 443.320.2233 x2

Address: 7090 Columbia Gateway Drive, Suite 140, Columbia, MD 21046

Support / Commissioning Services: support@autani.com

□ **Autani Sales**

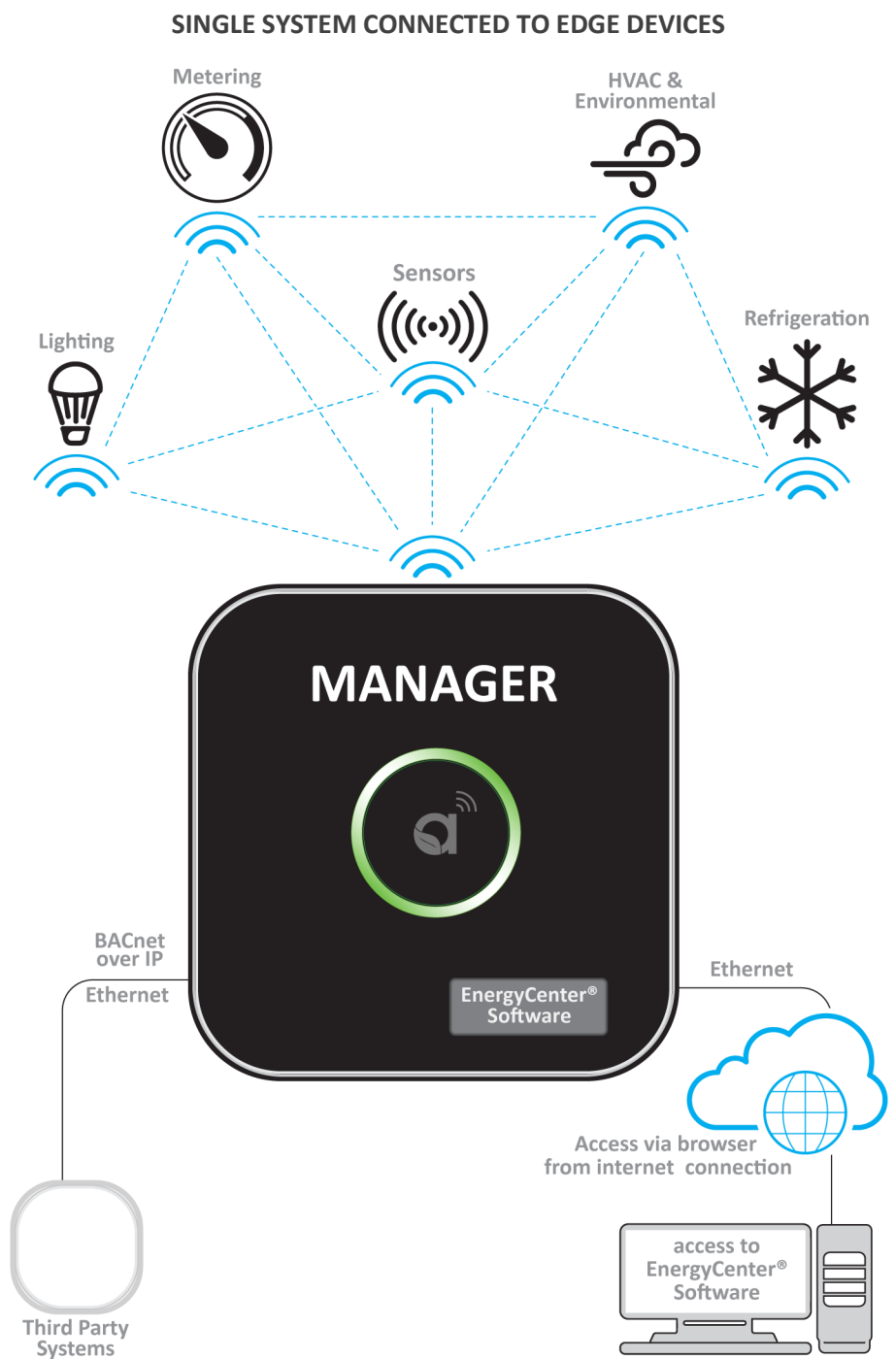
Phone: 443.320.2233 x1

Sales/Quotations: sales@autani.com, quotes@autani.com

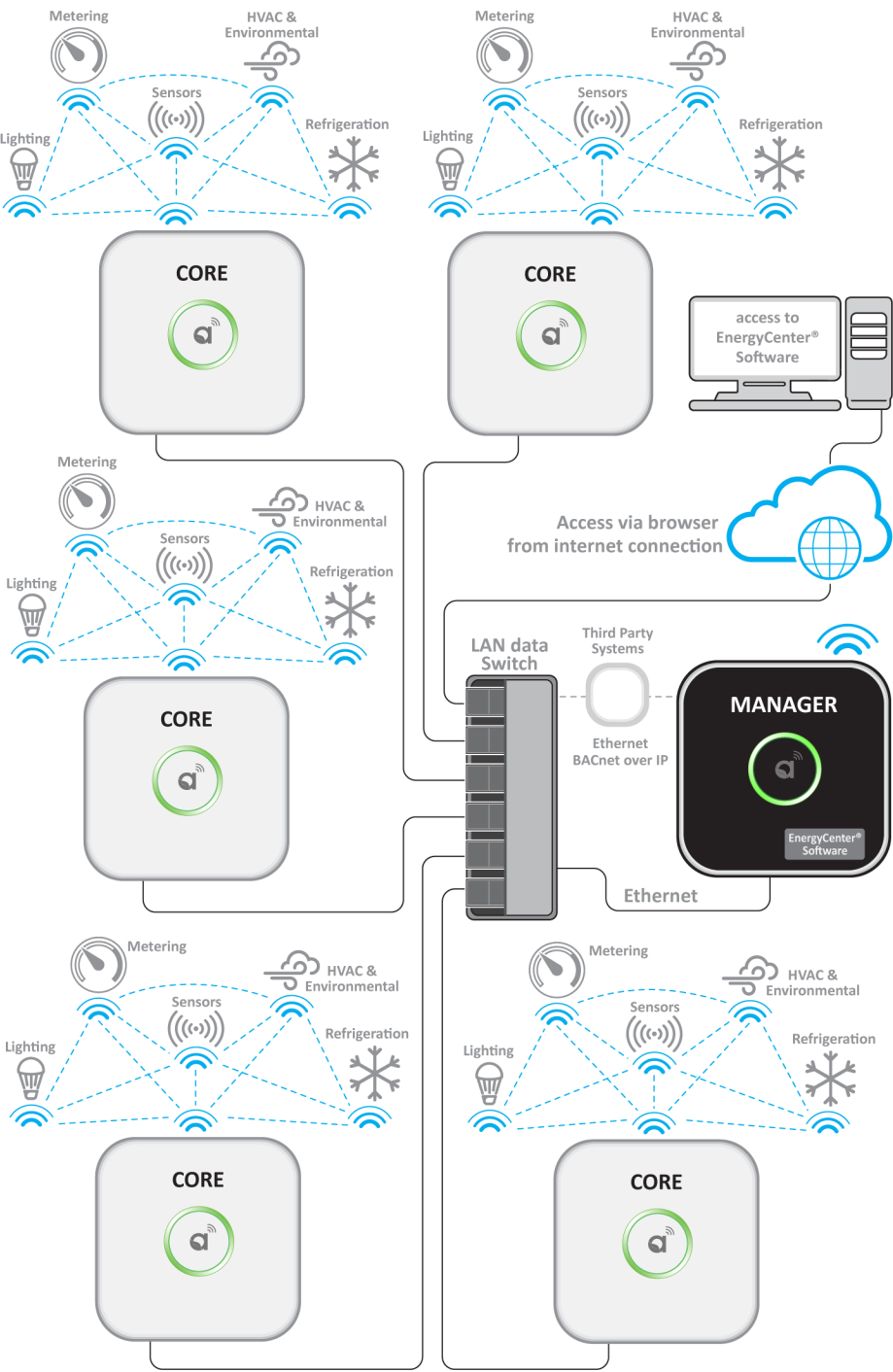
General Inquiries: information@autani.com

Hours of Operations: Monday to Friday, 9am to 5pm, Eastern Standard Time

2. System Overview



MULTIPLE CORES CONNECTED TO MANAGER



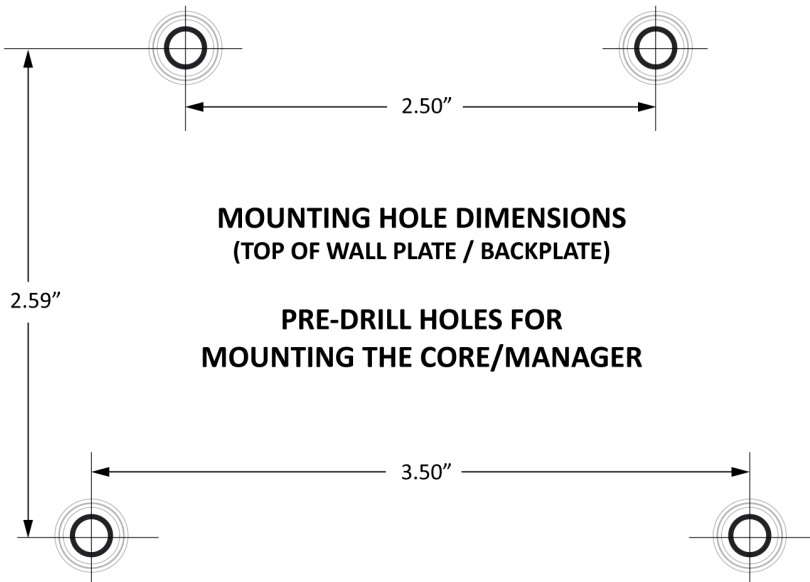
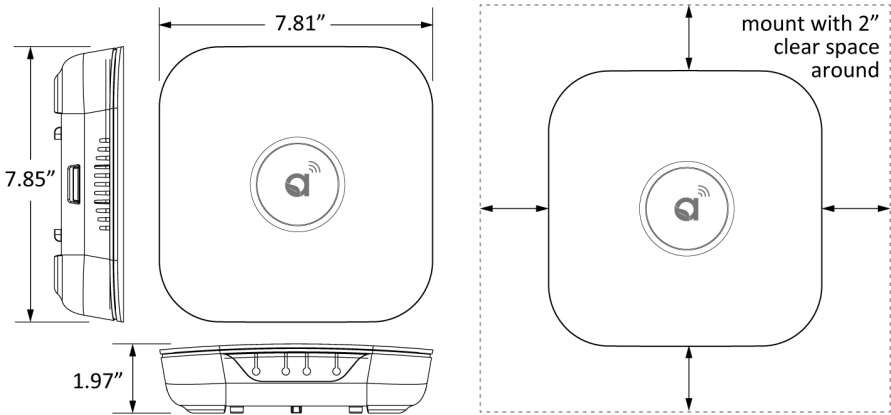
3. Mounting Instructions

The Autani CORE/Manager can be mounted to a ceiling tile or wall, and should be mounted within a range of 1000 feet line of sight to the controlling/communication devices, and near a 120VAC wall outlet. When using fixture controllers with the CORE/ Manager, please consult with Autani support to determine the distance between edge devices and the CORE/Manager, as these ranges may vary based on the edge device that is used.

NOTE: The CORE/Manager should NOT be installed near any type of heat sources. Specifically, heating systems or areas that are receiving direct sunlight for the majority of the day.

3.1. Space Requirement

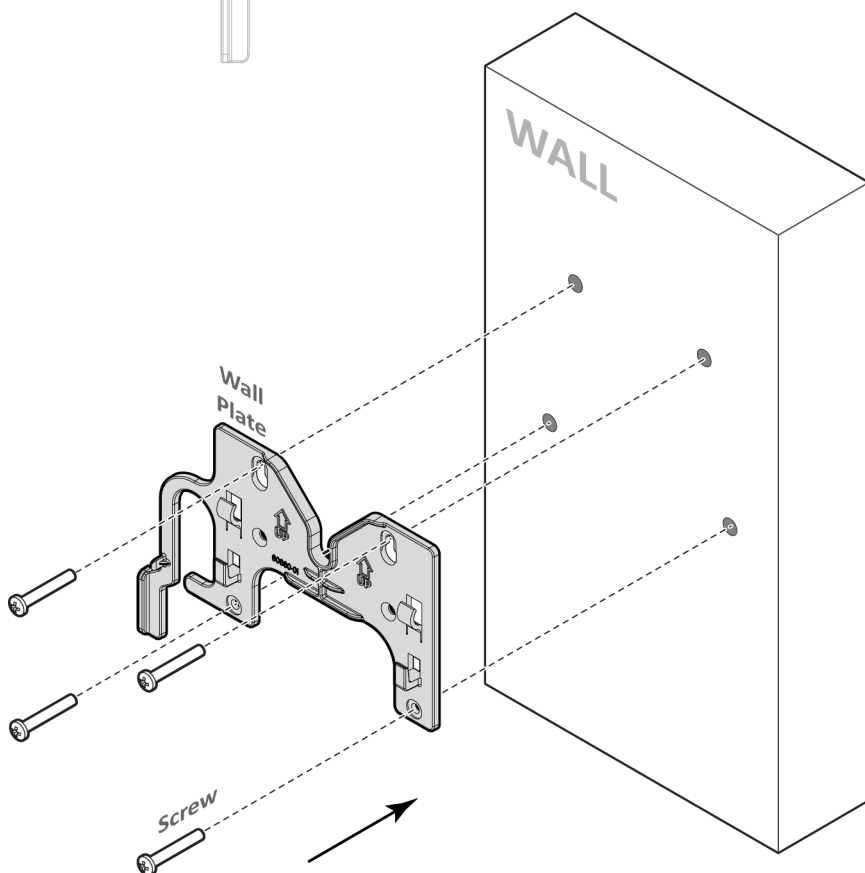
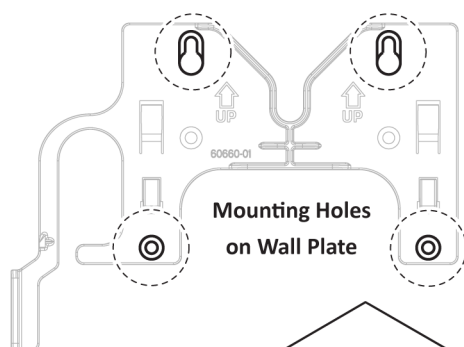
The CORE/Manager should be mounted with minimum clearances for ventilation and signal transmission, as shown below.



3.2. Mounting the CORE/Manager onto a Wall

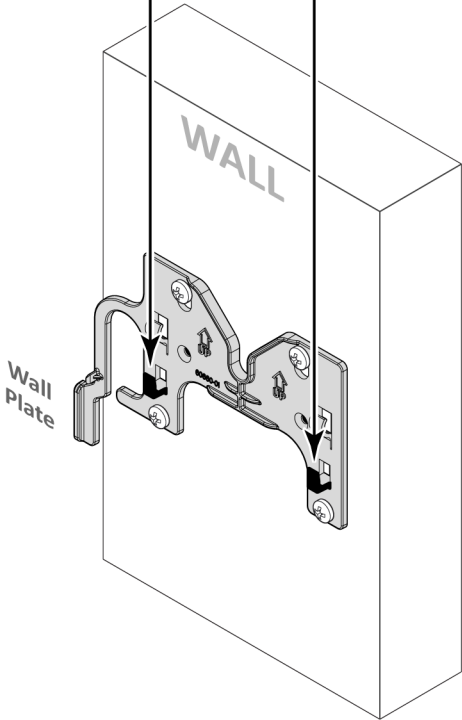
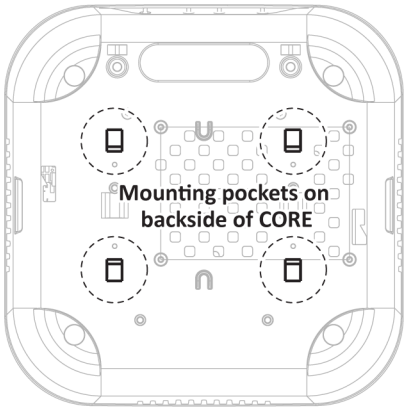
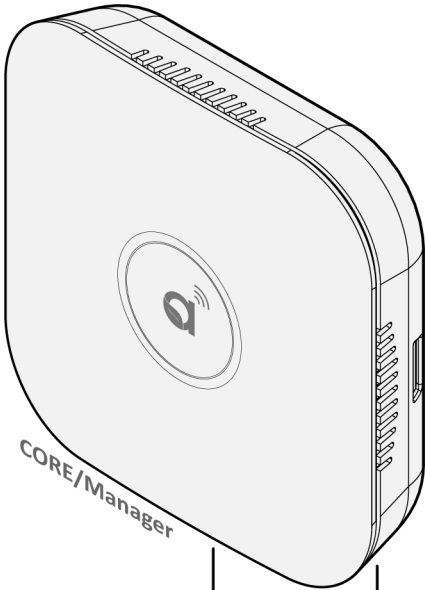
1. Position the wall plate on a wall and mark the four mounting holes. Remove the wall plate and pre-drill the mounting holes.
2. Insert wall anchors into the mounting holes, and position the wall plate to align with the mounting holes.
3. Insert the screws through the wall plate into the mounting holes. Tighten the screws.

Step - A



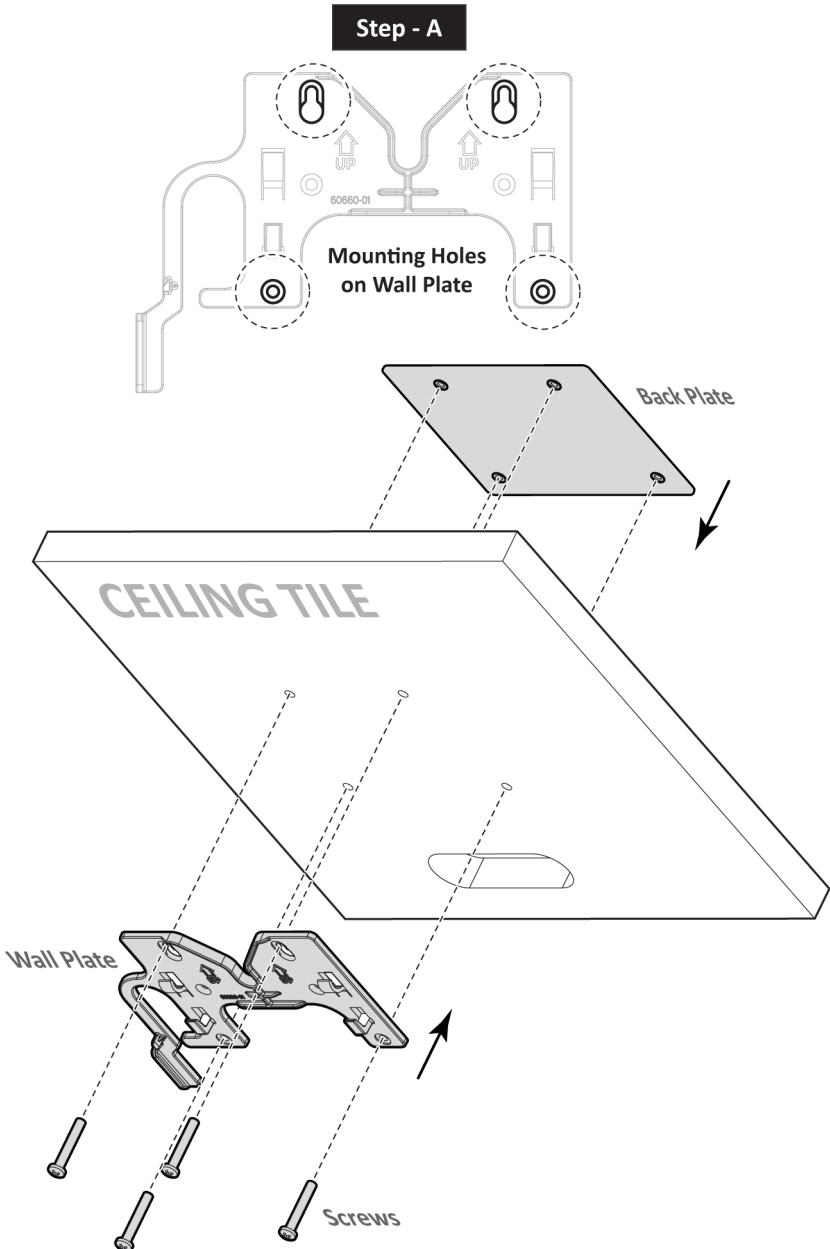
4. Insert the CORE/Manager into the groove on the wall plate. It will snap into place.

Step - B



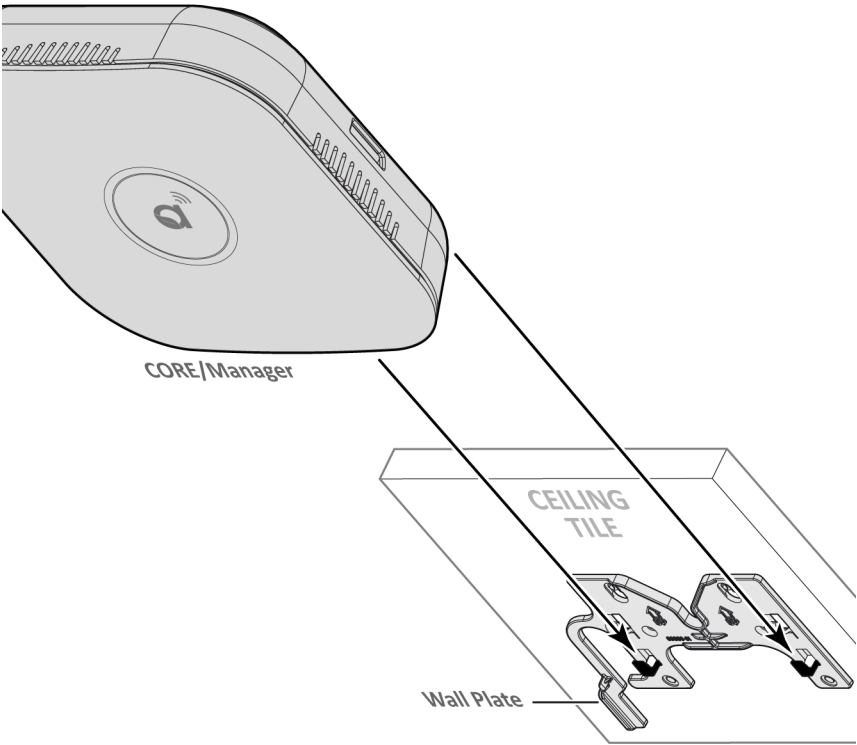
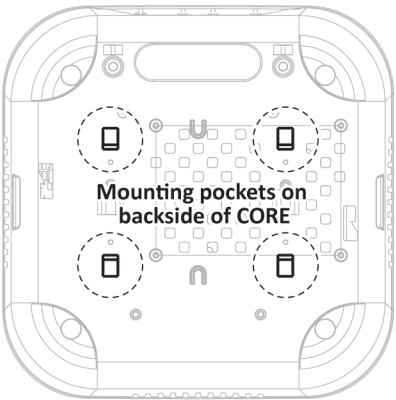
3.3. Mounting the CORE/Manager onto a Ceiling

1. Position the wall plate on a ceiling tile and mark the four mounting holes. Remove wall plate and pre-drill the mounting holes.
2. Position the wall plate on front of ceiling tile and back plate on back of ceiling tile, aligning the mounting holes.
3. Insert the screws through the wall plate, ceiling tile, and back plate. Tighten the screws.



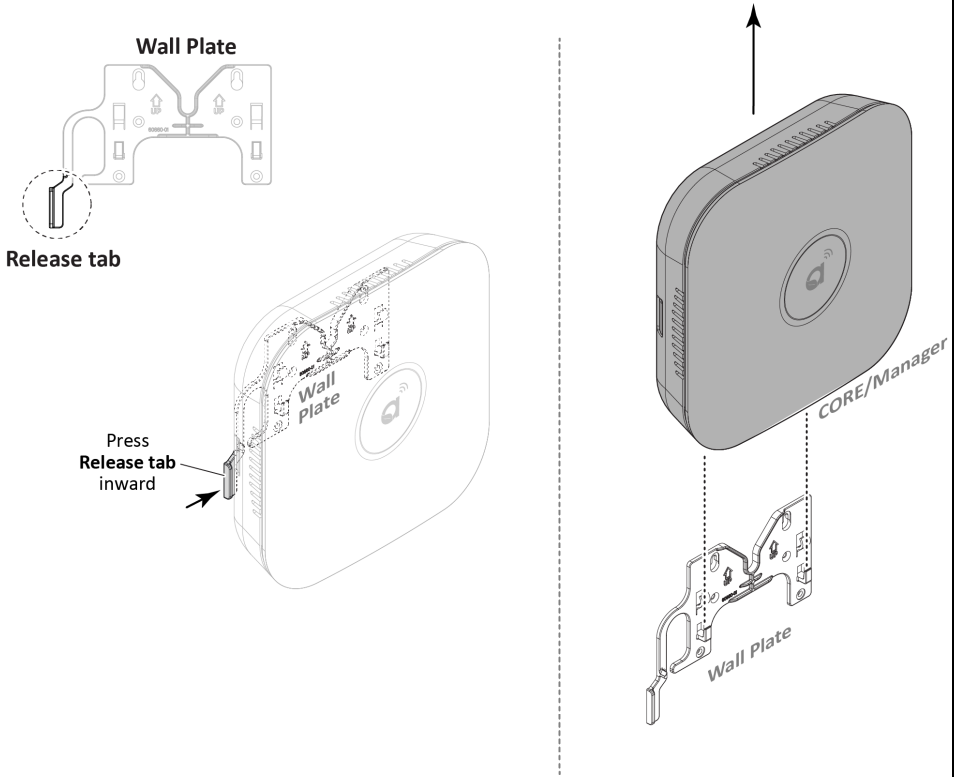
4. Insert the CORE/Manager into the groove on the wall plate. It will snap into place.

Step - B



3.4. Removing the CORE/Manager from Wall Plate

1. To remove the CORE/Manager from the wall plate, press the release tab inward on the wall plate, and then slide the CORE/Manager up.



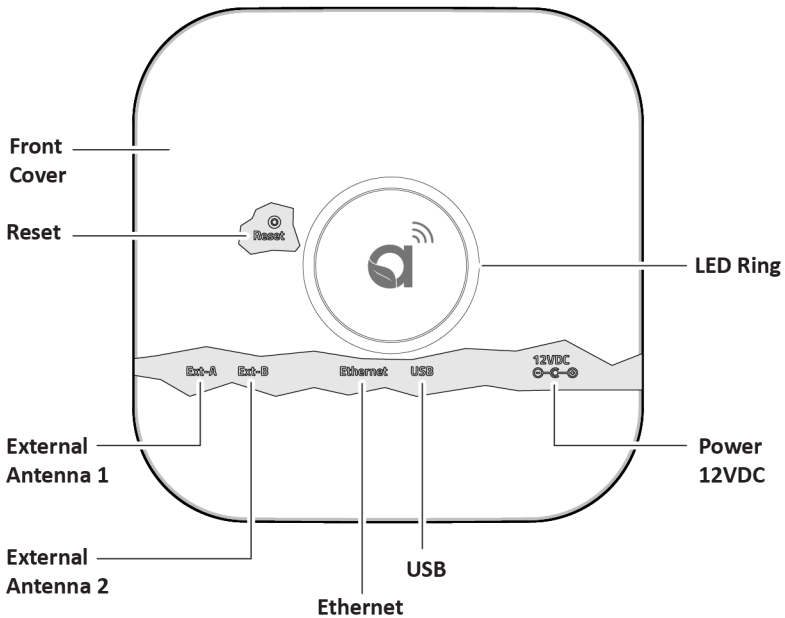
4. Hardware Connections



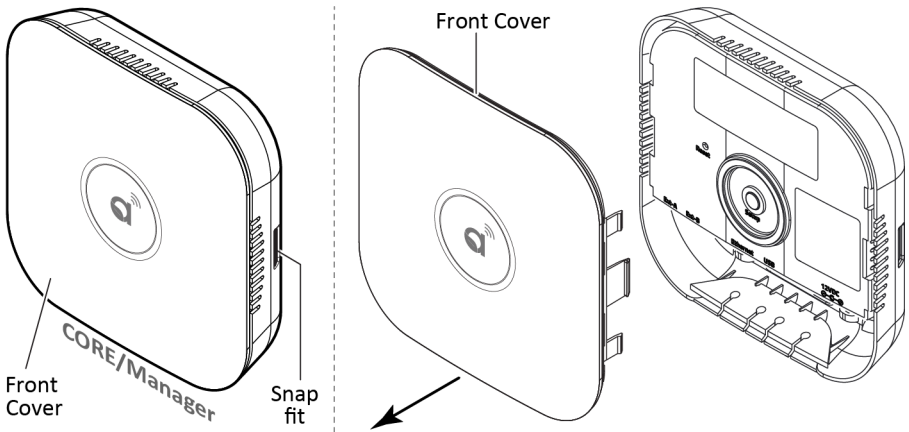
CAUTION

- The CORE/Manager must be installed and used in accordance with appropriate electrical codes and regulations.
- Installation by a qualified electrician is recommended.

autaniNet (Zigbee)



1. Remove the front cover from the CORE/Manager to make connections. Press the snap-fit on both sides of the CORE/Manager to remove the cover.



4.1. Connection to a Power

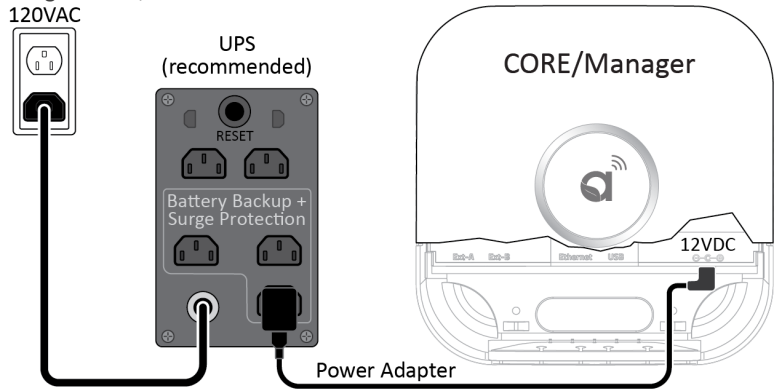
2. Connect a power source to the CORE/Manager. There are two options: direct power and POE.



NOTE: The CORE/Manager will power ON the moment power is supplied. In cases where this is not desired, it is recommended to do a safe power-down. Press and release RESET button and wait around 30 seconds until the LED ring goes dark. For more information on the status of LED ring, refer to section 5.1. *LED Ring Status*.

DIRECT POWER

Connect the provided AC/DC power adapter or similar device to the 12VDC port. **NOTE:** It is recommended to install the CORE/Manager with a UPS (Uninterrupted Power Supply) near a grounded, 120VAC wall outlet.

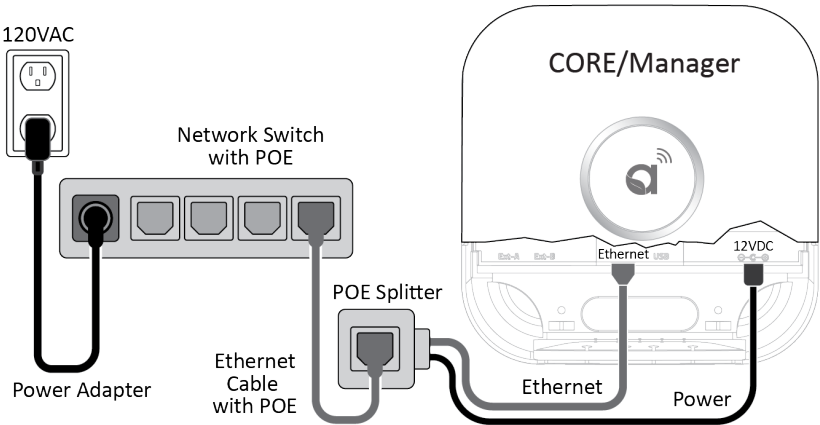


POWER OVER ETHERNET (POE)

The CORE/Manager can be powered using a network switch, POE injector, and an Autani sourced POE splitter. Below are two examples illustrating the connection options with the POE method.

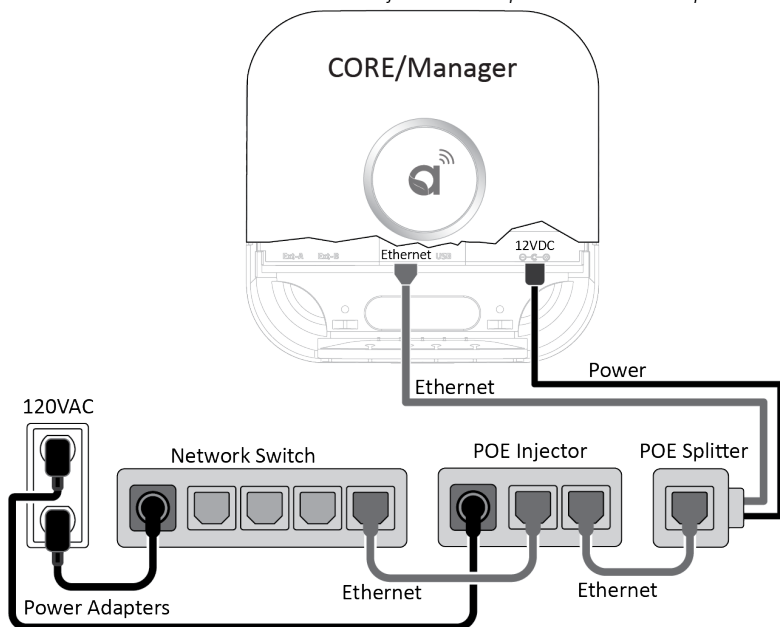
Example 1 :

120VAC wall outlet → Network Switch with POE → POE Splitter → CORE 12VDC port + Ethernet



Example 2 :

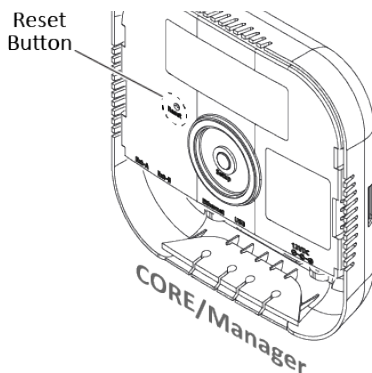
120VAC wall outlet → Network Switch → POE Injector → POE Splitter → CORE 12VDC port + Ethernet



NOTE: Using the POE method eliminates the need for an AC outlet near the CORE/Manager and is used in place of the provided AC/DC power adapter.

4.2. Connecting an External Antenna Extension Kit

1. Before initiating the connection, shutdown the core manager by pressing the Reset button once. Wait 15 sec for the Red spinning to go Dark. Then, start and wait for Green Spinning.

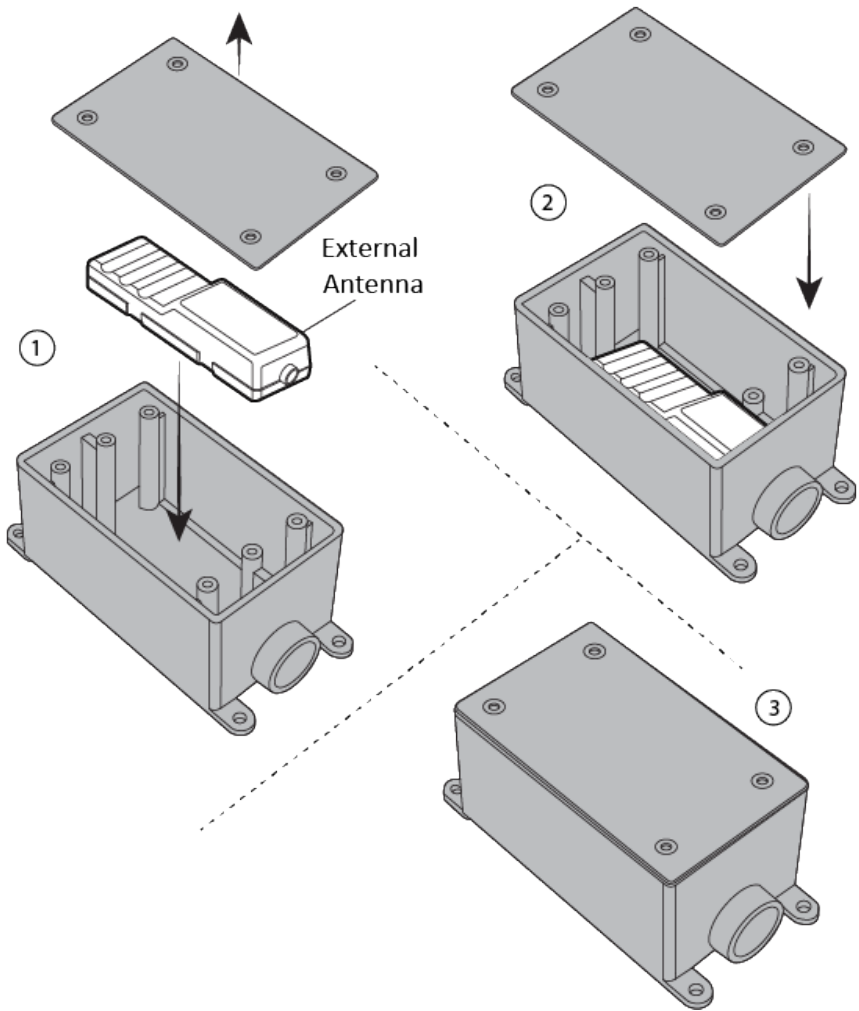


Shutdown Phase:

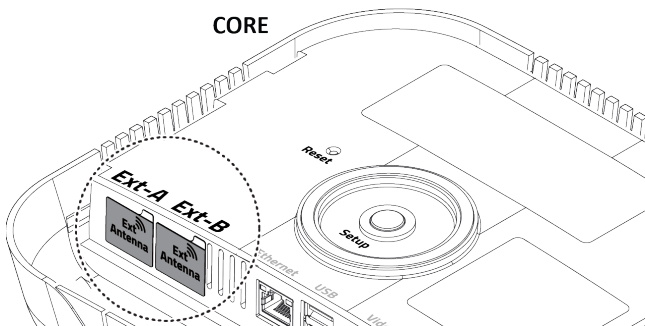
The LED ring will spin RED counterclockwise (takes ~15 seconds).



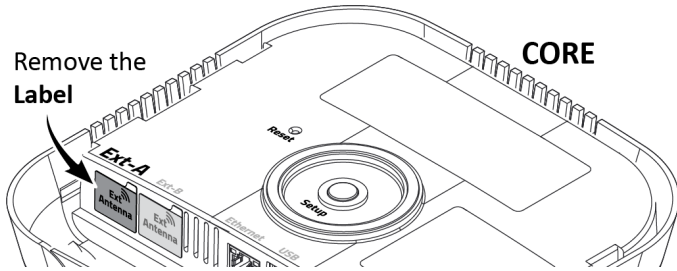
2. Place & fix the External Antenna into the Hard protective case as shown below,



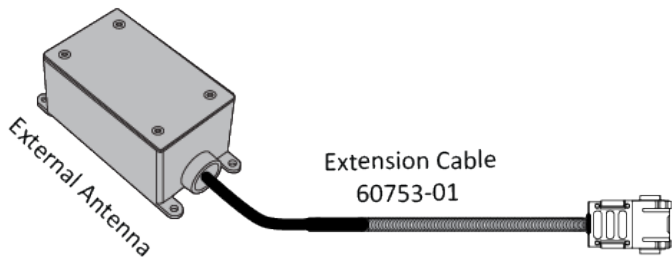
3. The CORE/Manager has two ports available for external antennas. The first port EXT-A is for connecting External Antenna, using Extension cable kit (CAT5, 60753-01).



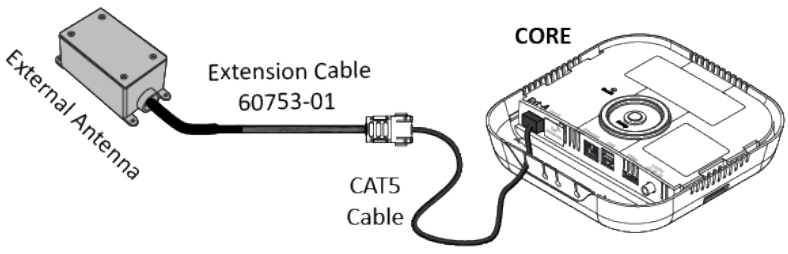
- i. To connect the Extension cable, remove the Label on the CORE/Manager EXT-A port.



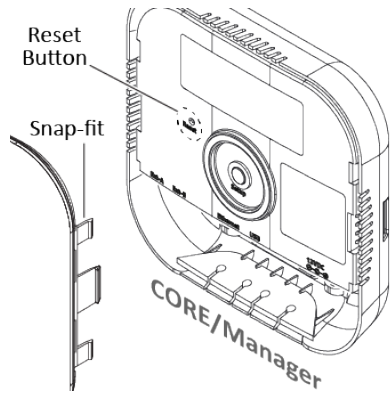
- ii. Connect one end of the Extension cable to External Antenna, and the other end to a CAT5 Cable.



- iii. Connect the CAT5 cable to CORE/Manager, as shown in the below illustration.



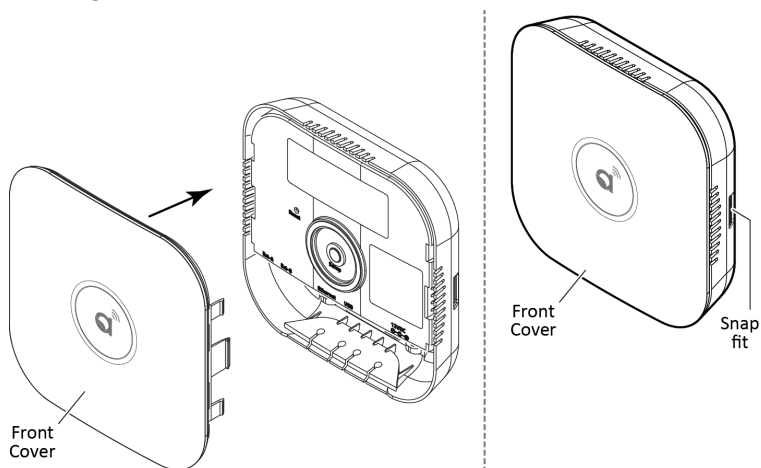
- iv. Once the extension cable is connected, press the reset button to start the Core.



- v. **Startup Phase:** The LED ring will start spinning GREEN clockwise when power is applied.



4. After all the connections are made, install the front cover on the CORE/Manager. Press lightly on both sides of the cover to allow the snap-fit pieces to insert into the CORE/Manager base.



5. Commissioning the CORE/Manager

5.1. LED Ring Status

1. Ensure all the connections are made before commissioning the CORE/Manager (as explained in the previous section).
2. The LED ring will confirm by displaying a green breathing pattern. The below illustrations describe what each color pattern on the LED ring indicates.

- **Power-up Phase:** The LED ring will start spinning GREEN clockwise when power is applied.



- **Breathe Green:** Limited to the first 2 minutes after successful start-up.



- **Network Issue:** If a network issue is detected at start-up, it will be indicated for up to 5 minutes. There are 3 distinct indications of a possible network issue.

No LAN Connection: The LED ring will show one-quarter WHITE.



No WAN Connection: The LED ring will show one-half WHITE.



No Remote Connection to autani.net (or www.mywebcomfort.net):
The LED ring will show three-quarters WHITE.



- The LED ring goes dark 2 minutes after successful boot or up to 5 minutes after boot with network issue.



- **System Error:** The LED ring will flash RED.



- **Shutdown Process:** The LED ring will spin RED counter clockwise (takes ~15 seconds).



5.2. Reset Button Functionality

The Reset button on the CORE/Manager is a power switch located inside the CORE/Manager. The reset button can be used in the following situations.

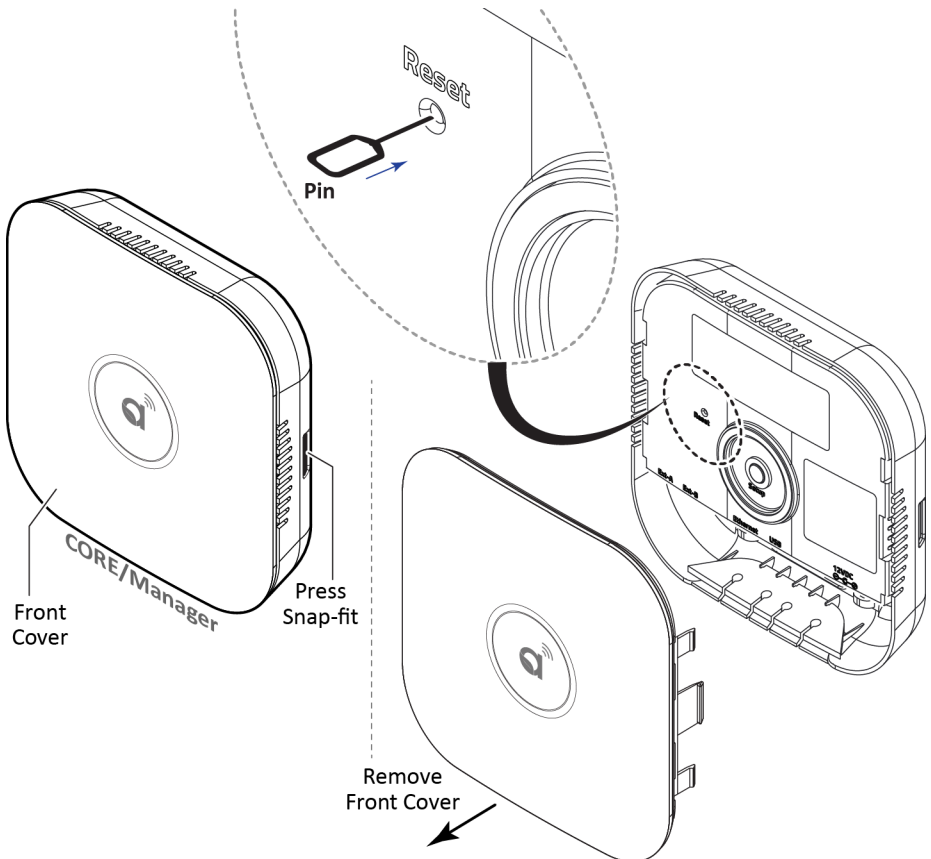
- When the network connection method to the CORE/Manager is changed, the CORE/Manager should be completely shut down and rebooted using the Reset button.
- When the system is locked or unresponsive.
- When the CORE/Manager is physically relocated.

Remove the front cover on the CORE/Manager to use the Reset button. The Reset button is actuated through the hole using a straightened paperclip or similar object.

- In most cases, a short-press will trigger the OS activity to shut down the CORE/Manager if it is ON.
- A short-press will cause a “powered but turned-off” CORE/Manager to start. This operation is in lieu of disconnecting and reconnecting the power source to cause an automatic start.

Unique/Special Operation

- A long-press will force the CORE/Manager to turn OFF. This is not a recommended operation unless the device fails to respond to a short-press after 60 seconds and should be used in lieu of disconnecting power to force a shut down.



5.3. Selecting a Connection Method

There are two options available to connect the CORE/Manager to a system.

- 3. Local Area Network (LAN) Access Only
 - In this mode, the CORE/Manager is placed on a Local Area Network (LAN) only and does not have access to Autani’s cloud-based services. This configuration will not support remote access to your facility, nor will Autani personnel be able to directly connect to your devices to help troubleshoot with support issues. Data is not backed up off-site.
- 2. Internet-Based Remote Access via the Worldwide Web
 - In this setup, you can remotely manage your facility via the www.autani.net (or www.mywebcomfort.net). All changes are automatically backed up, and Autani personnel can connect to a system at your request to assist in remote troubleshooting.

Assess your need for features that are dependent on the way the Autani CORE/Manager is connected and select your connection method.

NOTE: After being configured, the Autani CORE/Manager monitors and manages the system with or without a network or computer connection. A network or computer connection is required to configure the system, edit settings, and for users to monitor the system.

Table 1: Designated Features

Features	Remote Access (via the Web) ¹	Local Area Network (LAN) Access ¹
Access Autani CORE/Manager from anywhere	⊙	
Access Autani CORE/Manager from inside your firewall (on-site or VPN)	⊙	⊙
Off-site customer support can: ▪ View your system ▪ Issue over-the-air commands to help resolve some issues	⊙	
View multiple Autani CORE/Managers from a single interface	⊙	
E-mail notification of alerts (user-defined, system errors and system warnings)	⊙	⊙
Off-site backups	⊙	

¹ By default, the Autani CORE/Manager uses a DHCP-assigned IP address when connected to a LAN.

NOTE: After you have accessed the EnergyCenter® software, you have the option to set a static IP address (refer to 5.3.1.2 Changing to a Static IP Address).

Use Table 2 to determine the requirements for your selected connection method and obtain the needed items and information. For more information, contact your IT Administrator.

Table 2: Requirement

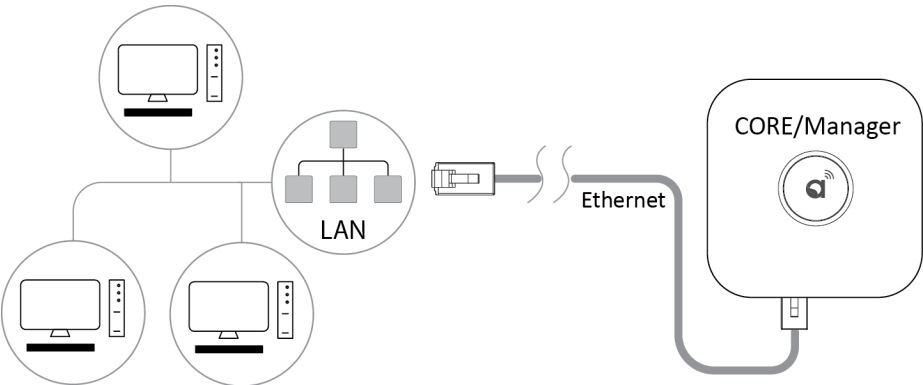
Requirements	Remote Access (via the Web)	Local Area Network (LAN) Access
Internet access: One of the following ports are open on the LAN and exposed to the Internet: ■ UDP 54261, 59370, or 59371 ■ TCP 443	⊙	
LAN access with active Ethernet port	⊙	⊙
Ethernet cable	⊙	⊙
Web browser (Google Chrome & Mozilla Firefox)	⊙	⊙
MAC address of Autani CORE/Manager	⊙	⊙
IP address of the Domain Name System (DNS) server (or one of the free DNS servers available on the web) ¹	⊙	
IP address assigned to the Autani CORE/Manager	⊙	⊙
Mail server access for e-mail alerts	⊙	⊙

¹ More information is supplied in the applicable setup instructions on the back of this sheet.

The following sections will explain each connection method in detail. You will require your IT support in these steps.

5.3.1. Local Area Network (LAN) Access

In this method, the CORE/Manager is connected to a Local Area Network which is connected to other systems. The advantage of this method is that the system can be commissioned without remote access, even before Autani provisions the remote connectivity.



To connect to a LAN with a DHCP server:

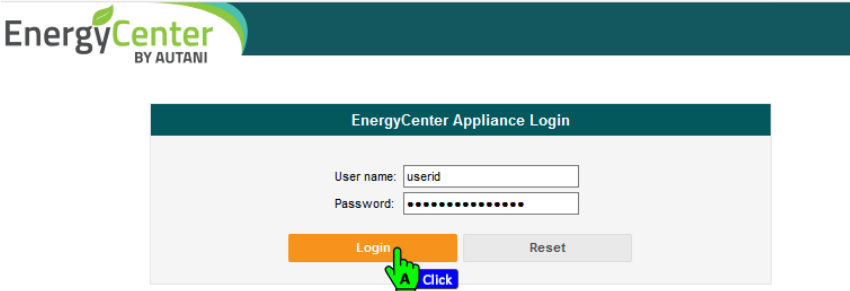
1. Connect the Autani CORE/Manager Ethernet cable to an active Ethernet port on the LAN.
2. The MAC address for the CORE/Manager is found under the cover. This may be referenced if the network administrator prefers to implement a DHCP Reservation on the network. (Remove the outer cover to see the MAC address/serial number on the product label placed inside the CORE/Manager.)
3. This information should be provided by the IT administer for the network. Alternatively the local IP address can be determined using a USB stick. (Refer to section 5.3.5. *Using USB Stick to Configure*. **NOTE:** The last line in the configuration file produced by the USB stick will contain the current local IP address of EnergyCenter®.)

5.3.1.1. Log In Over the LAN using Local IP address

1. Enter local IP address (provided by your IT or from USB stick configuration file) in a supported web browser.



2. Log in to the EnergyCenter® software.



3. Click **Get Started** on the Welcome to EnergyCenter® dialog.



4. For further instructions, refer to section 5.3.4. *First Time Login to EnergyCenter®* through Remote Access Web Portal.

5.3.1.2. Changing to a Static IP Address

By default, the Autani CORE/Manager uses a DHCP assigned IP address when initially connected to a LAN. After accessing the Autani EnergyCenter® software, you have the option of setting a static IP address.

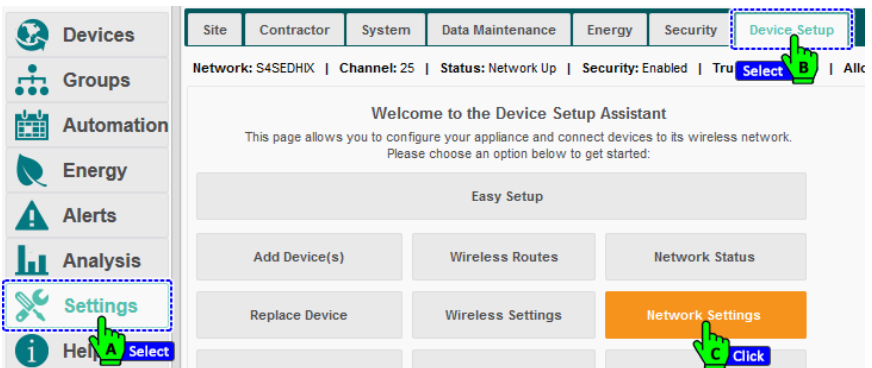
NOTE: Clarify static IP information with your IT Administrator prior to proceeding. Misconfiguration of any network settings may result in lost communications with the Autani CORE/Manager.

Obtain the following information from your IT Administrator:

- Static IP address
- Netmask
- Default gateway (IP address of the router)
- IP address of your DNS server or one of the free DNS servers

To assign a static IP address after initial setup, log in to EnergyCenter® and, refer to section 5.3.4 *First Time Login to EnergyCenter®* through Remote Access Web Portal Alternatively, refer to section 5.3.5. *Using a USB Stick to Configure Static Network Settings (Optional)*, then continue with the following instructions.

1. Click **Settings > Device Setup > Network Settings**.



2. Enter the following:

- A unique and valid static IP address on the local network
- A valid netmask
- The default gateway
- The IP address of your DNS server or use one of the free DNS servers

NOTE: To access the free, Google Public DNS Server, use one of the following IP Addresses: 8.8.8.8 or 8.8.4.4.

3. Click **Save** and wait approximately one minute for the static IP address change to take effect.

Site Contractor System Data Maintenance Energy Security **Device Setup**

Network: S4SEDHX | Channel: 25 | Status: Network Up | Security: Enabled | Trust Center: No | Allow J

Network Settings

BACnet Interface Enabled: ☒
BACnet Device Object Identifier: 716204

Tridium Interface Enabled: ☒

Remote Access Enabled: ☒
Remote Access License Key:
Remote Support Account Enabled: ☒

☐ Obtain settings automatically using DHCP
☐ Use Direct Connection (192.168.21.254)
☒ Use the following settings

IP Address:
Netmask:
Default Gateway:
DNS Server:

Warning: You may not be able to communicate with your appliance if any network settings are misconfigured. Click Help and refer to the user guide for more information.

4. Enter the static IP address into the browser's address bar, and then press **Enter**.

New Tab

xxx +

xxx.xxx.xxx.xxx I Type

Search the Web

5. Log in and resume the application. (Refer to 5.3.4. *First Time Login to EnergyCenter®* through Remote Access Web Portal)



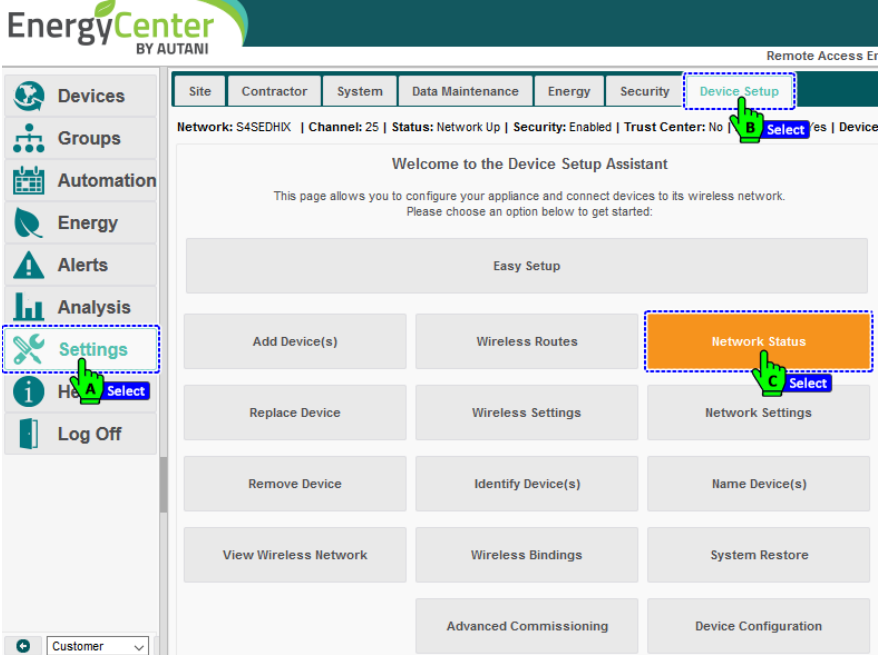
NOTE: Make a note of the IP address for future reference.

6. After logging on to EnergyCenter®, follow the instructions provided in 5.4. *Accessing EnergyCenter® and Commissioning Devices*.

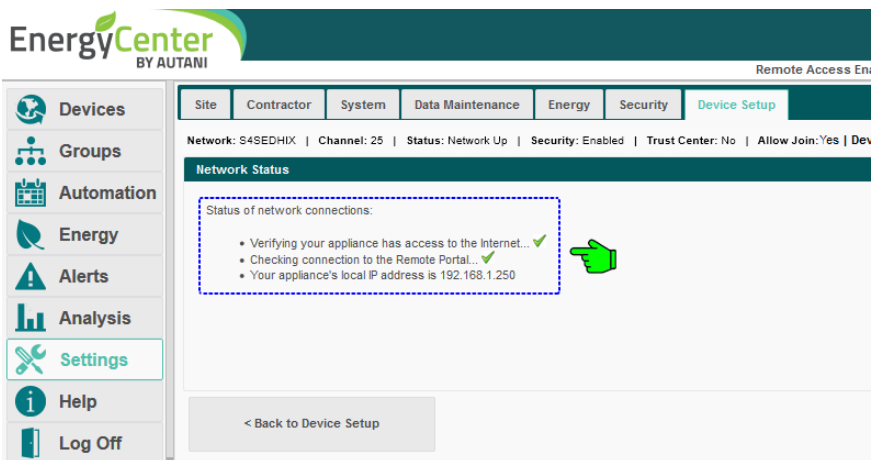
5.3.2. Verifying the Remote Access Capability

The user can verify if their system can be remotely accessed by following the instructions below.

1. Select **Settings > Device Setup > Network Status**.

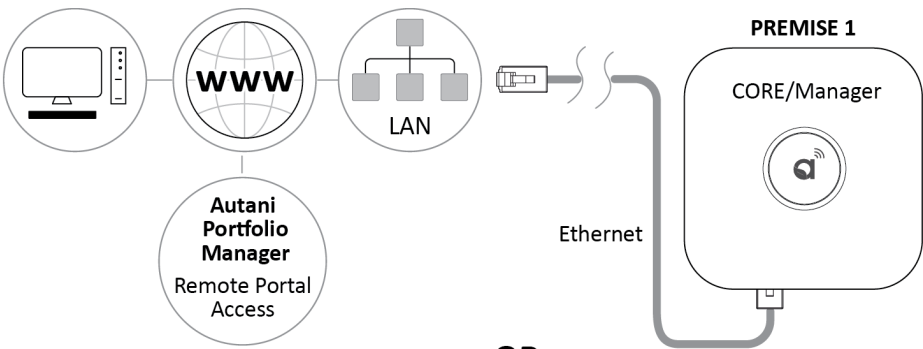


2. The Network Status screen appears, confirming access to the Internet and Remote Portal connection. (Refer to section 6. *Troubleshooting*.)

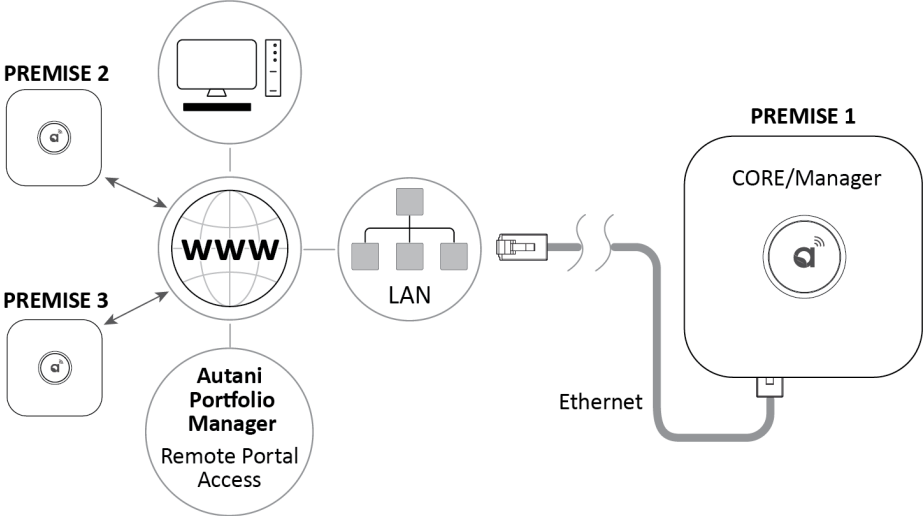


5.3.3. Remote Access via the Worldwide Web

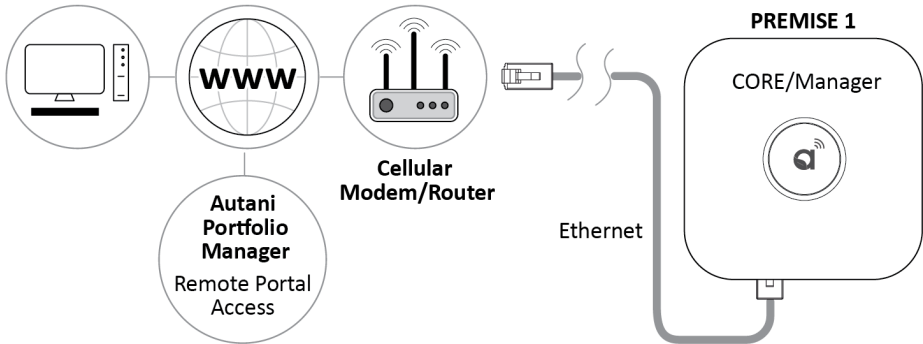
In this method, the CORE/Manager is connected to the Internet/Cloud through which the systems are configured. Follow the instructions in this section to perform the Remote Access Configuration. For any issues or problems related to remote access, please contact Autani support (<http://www.autani.com/contact/>). Below are illustrations showing how the CORE/Manager connects with different systems or networks.



OR



OR



NOTE: Before proceeding to the remote access configuration, you will need to verify that your system has the provision for remote access. Refer to section 5.3.2. *Verifying the Remote Access Capability.*

To connect to a LAN with a DHCP server and then enable remote access:

1. If your firewall is filtering outbound traffic, an outbound port forward will need to be made between the local IP address of your CORE/Manager and www.autani.net (or www.mywebcomfort.net) using one of the following ports:

UDP: 54261, 59370, or 59371

TCP: 443

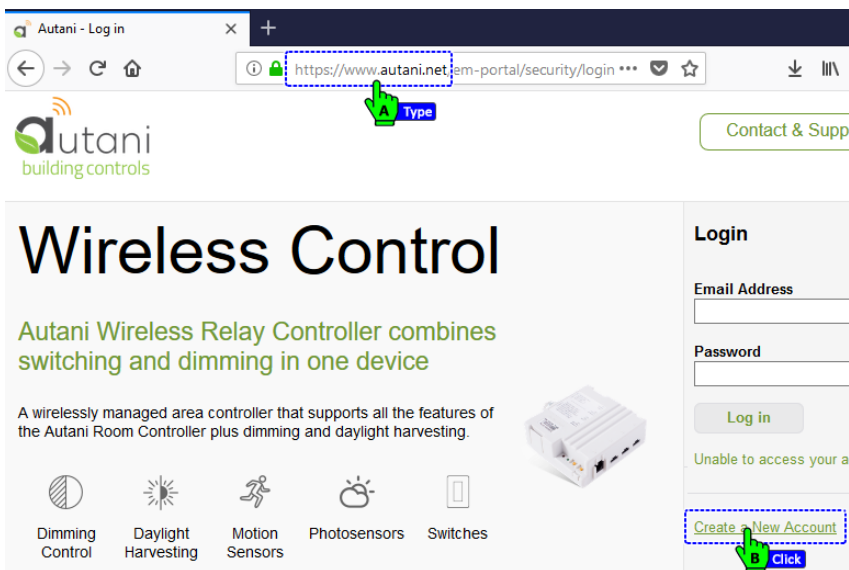
NOTE: For more information, see your IT Administrator.

2. Connect the Autani CORE/Manager Ethernet cable to an active Ethernet port on the LAN.

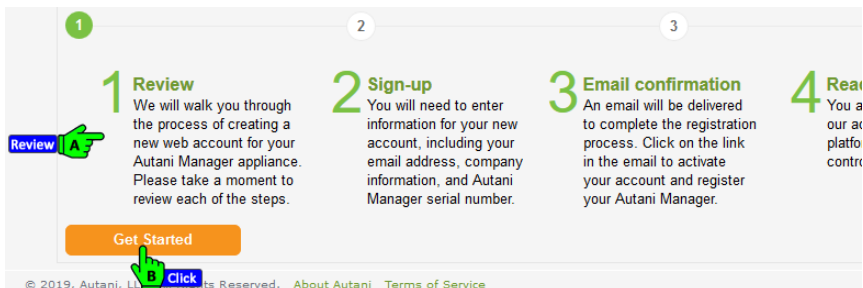
NOTE: For more information, see your IT Administrator.

5.3.3.1. Create a New Account

1. Open the browser on your computer.
2. Go to www.autani.net (or www.mywebcomfort.net).
3. On the Autani login screen, click the **Create a New Account** link.



4. Review the four steps required to create an account, and then click **Get Started**.



5. Enter user account and company information and as well as the MAC address/serial number. (Remove the outer cover to see the MAC address/serial number on the product label placed inside the CORE/Manager.)

NOTE: For multiple accounts associated with the same MAC address/serial number, contact Autani customer support.

6. Click the **Terms of Service** link, read the displayed text, and then click the **back** button on the address bar.
7. Select the **I agree to the Terms of Service** checkbox, and click **Next Step**. An email message will be sent to the email address for the user account.

Create a New Account

1 2 3 4

User Account

Email Address: XXXXXXXXXXX@XXX.com

First Name: XXXXXXXXXXX

Last Name: XXXXXX

Choose a Password: *****

Minimum of 8 characters in length

Re-enter Password: *****

Word Verification: Type the characters you see below.

raffe

raffe

Letters are not case-sensitive

☒ I agree to the [Terms of Service](#).

Next Step

Company Information

Company Name: XXXXXXXXXXX

Address Line 1: XXXXXXXXXXX

Address Line 2: XXXXXXXXXXX

City: XXXXXXXXXXX

State: Select State

Zip Code: XXXXXXXXXXX

Phone Number: XXXXXXXXXXX

Autani Manager

Serial Number: AUTXXXXXXXXXX

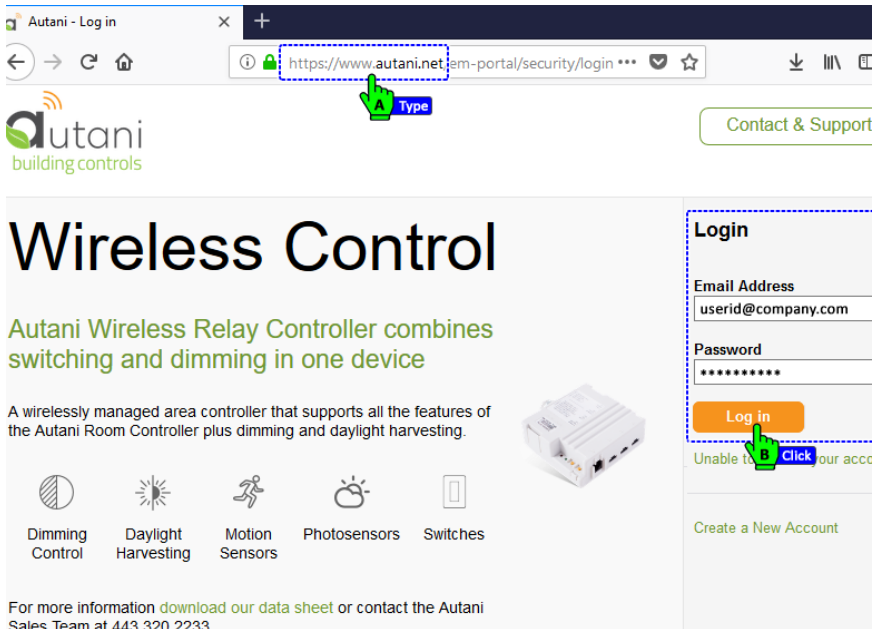
Provide the serial number from one of your new Autani Manager appliances

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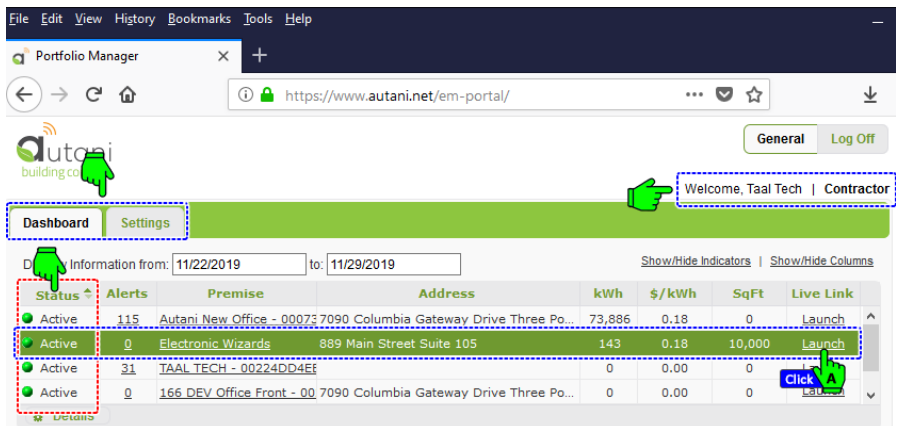
8. Click on the link in the email message to activate your account.
9. Enable remote access.
 - i. Click the login link.
 - ii. Enter your email address and password, and then click **Log in**.
 - iii. Select the Autani CORE/Manager with the MAC address in the premise name, and then click the **Enable Remote Access** button.
 - iv. Click **Yes** to enable remote access.
 - v. Read the End User License Agreement, and then click **Yes** to accept it.
 - vi. Enter your email address and click **OK**. A confirmation email will be sent to you.
 - vii. Click **OK** to close the Remote Access confirmation dialog box.
 - viii. Click the link in the confirmation email message to complete the enabling of remote access.
10. Access an Autani CORE/Manager appliance.

5.3.4. First Time Login to EnergyCenter® through Remote Access Web Portal

1. Open the browser on your computer.
2. Enter **https://www.autani.net/** in the address bar and press enter.
3. The login screen appears as shown below. Enter the credentials provided in the package, and click **Log in**.

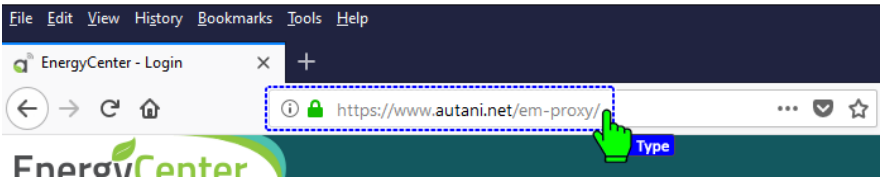


4. After a successful login, you will see a portal displaying your contract details and a **Dashboard** listing the premises associated with the contract. Click on the **Launch** link for your premise (system) to access it.



NOTE: If the **Status** of the system does not go **Active**, then try to log in across the LAN and verify the *Network Status* page on the EnergyCenter®. Refer to sections 5.3.1. *Local Area Network (LAN) Access* and 6. *Troubleshooting*.

- Wait a few seconds for the Autani CORE/Manager to boot up. When the status is active, the system login screen appears.
- Log in to the EnergyCenter® software with the same credentials used for the Autani portal. (If you win logging in through web portal (autani.net)).

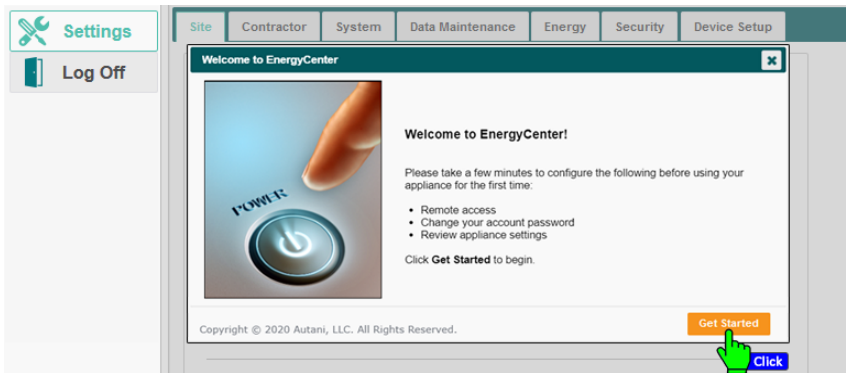


Enter the default user name and password, and then click **Login**.

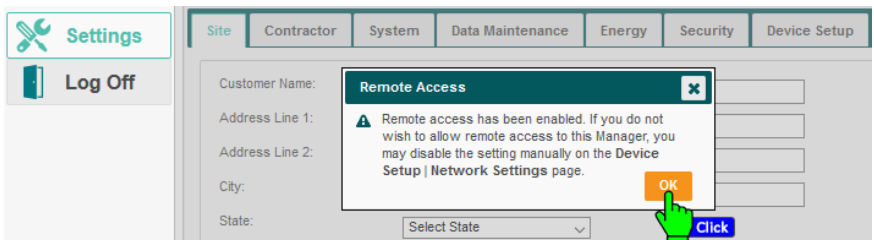
- The default user name is **admin**.
- The default password is **password**.

A screenshot of the 'EnergyCenter Appliance Login' form. It has a title bar 'EnergyCenter Appliance Login'. Below it, there are two input fields: 'User name:' with the text 'admin' and 'Password:' with a masked password '*****'. There are two buttons: 'Login' (orange) and 'Reset' (gray). A green hand icon is pointing to the 'Login' button, and a blue 'Click' label is next to it.

- Click **Get Started** on the Welcome to EnergyCenter® dialog.



- Click **OK** on the Remote Access dialog.



9. The **Change Password for admin account** dialog appears. Enter in a new password and click on **Save**.

Change Password for User Account: admin

To change your password, please provide your current password.

Username: admin

Current password:

New password: Type

Confirm new password: B

Save Ca

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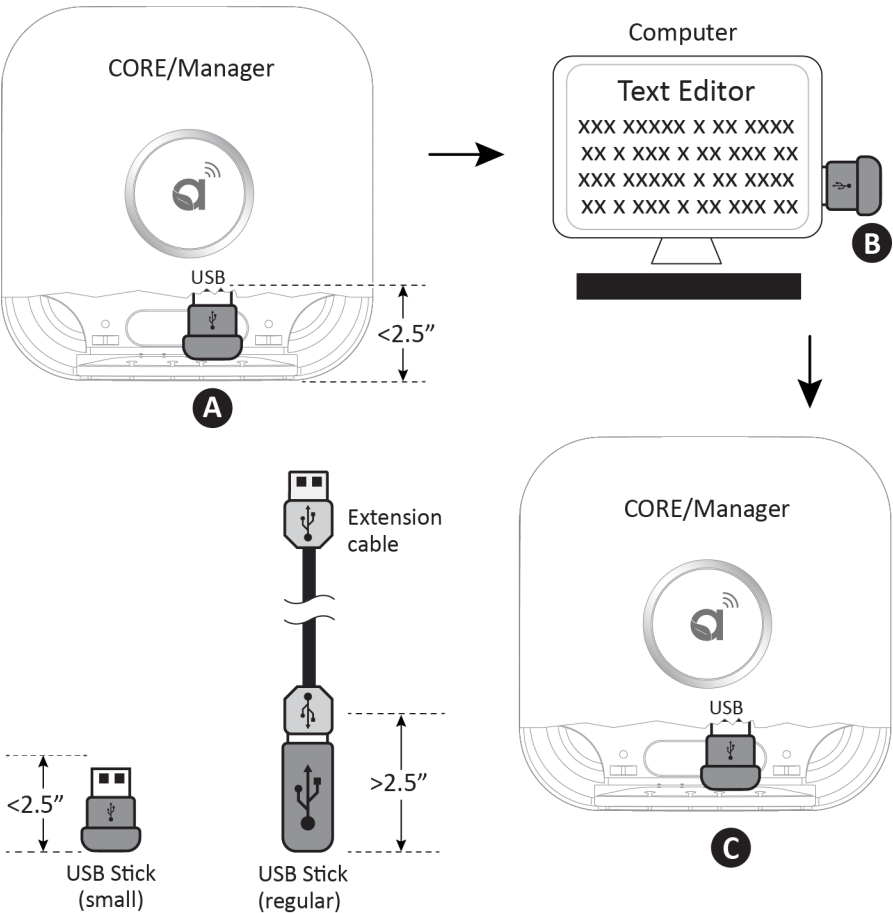
Phone Number:

10. Next, follow the instructions provided in 5.4. *Accessing EnergyCenter® and Commissioning Devices*.
11. If the computer is disconnected from the Autani CORE/Manager, reconnect it for the designated features listed in *Table 1: Designated Features*.
12. Follow the instructions provided in 5.3.1.2. *Changing to a Static IP Address* for checking the remote access.

5.3.5. Using a USB Stick to Configure Static Network Settings (Optional)

A USB stick can be used to produce and edit the configuration files. There are two USB ports available inside the CORE/Manager. Remove the top cover to access the USB ports.

NOTE: The height available for the USB stick insertion is around $<2.5''$. A small form factor USB stick is recommended, otherwise an extension cable should be used for the regular USB stick.

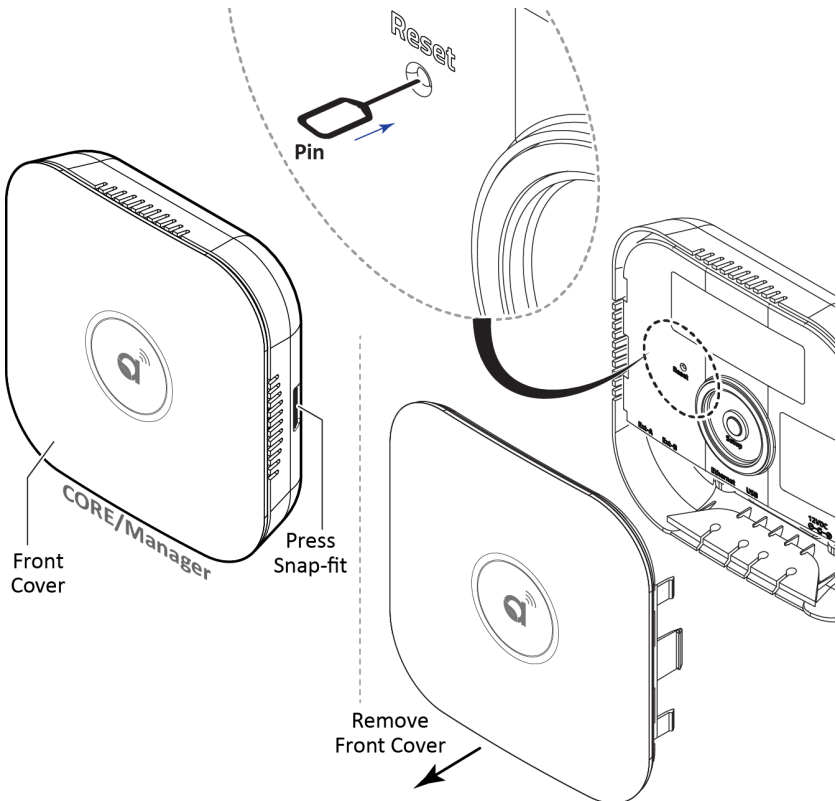


1. Locate a small form factor USB stick that is formatted as FAT32 (typically the default).
2. If the USB drive has ever been used for this purpose previously, open it from a PC and ensure you delete the "autani-networking-cfg.txt" file before moving forward.
3. With the CORE/Manager powered and plugged into your local area network, insert the USB drive into one of the USB ports available inside the CORE/Manager.
4. Leave the USB stick inserted for 2 minutes.
5. Remove the USB stick and insert it into your PC.
6. Open the USB folder and locate the text file "autani-networking-cfg.txt" in the main directory.

7. Note that the last line of text in the file will provide the CORE/Manager's current IP address under DHCP.
8. Using a text editor, the user can follow the instructions in the file to change the networking configuration between DHCP (default) and static. If switching to a static configuration, you must enter the IP address, subnet mask, default gateway, and primary DNS server.
9. Save the text file after making your edits and insert the drive back into the CORE/Manager while it is powered ON.
10. Wait two minutes with the USB stick inserted for the settings to apply.
11. Remove the USB stick, then perform a restart, after restarting, the Manager/CORE will now use the statically assigned IP settings. To change these settings back to DHCP repeat the steps above.

Note that the Autani Manger/CORE will not overwrite your text file. Make sure you delete the original file before reconfiguring the network OR verifying the current settings. To perform a controlled reboot, follow the instructions as below,

- i. Remove the front cover on the CORE/Manager.

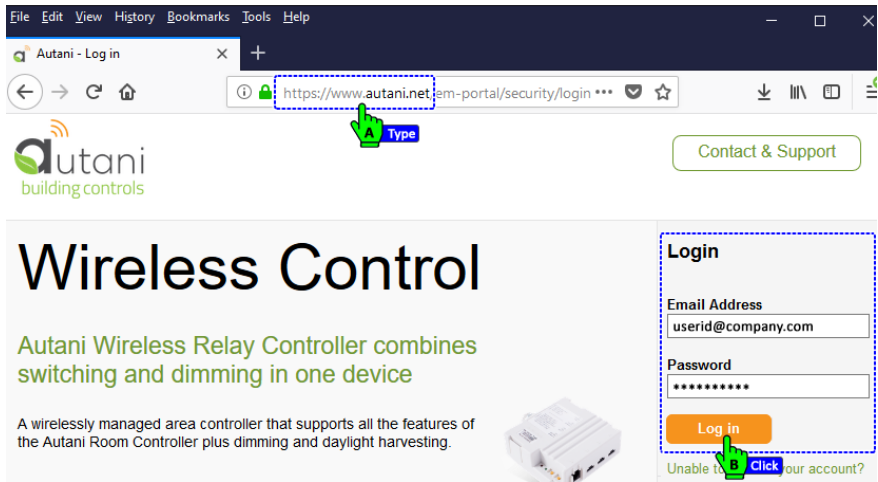


- ii. Using a paper clip, press and release the Reset button once. Wait 60 seconds. The CORE/Manager is OFF when the LED ring on the front of the CORE/Manager is no longer lit.
- iii. Using a paper clip, press and release the Reset button once to restart the CORE/Manager.

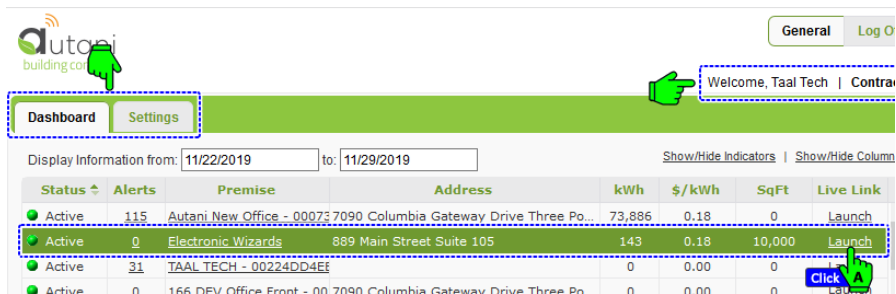
5.4. Accessing EnergyCenter® and Commissioning Devices

5.4.1. Log In to Autani Portal and EnergyCenter®

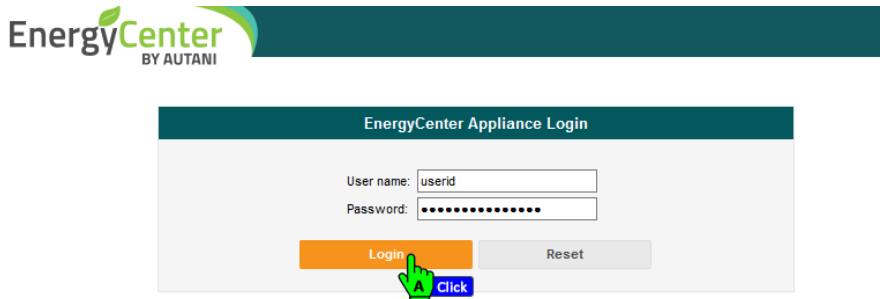
1. Once a network connection is made, open a browser from your computer and log in to the Autani portal (<https://www.autani.net/>). Use the credentials provided in the package.



2. After successfully logging in, you will see a customized portal displaying your contract details. There are two tabs available, **Dashboard** and **Settings**. The **Dashboard** is loaded by default with the premises associated with your login credentials, and the **Settings** tab will allow you to change your account details and password.
3. Within the Dashboard, click on the **Launch** link of the premise you wish to access.



4. Log in to EnergyCenter® with the same credentials used for the Autani portal.



5. The EnergyCenter® application is launched, displaying the **Devices** section by default.

The screenshot shows the EnergyCenter BY AUTANI dashboard. The top navigation bar includes links for Dashboard, Thermostats, Lights, Sensors, Plugs, Meters, Loads, and Extenders. The left sidebar contains links for Devices, Groups, Automation, Energy, Alerts, Analysis, Settings, Help, and Log Off. The main content area displays the Status section with various device counts and active status indicators. Below this, there are sections for Lighting and HVAC.

Status			
Wireless Network: ●	Thermostats: 2 ● 2 Active	Lights: 6 ● 6 Active	Computers: 0
Devices: 88	Fans: 0	Sensors: 31 ● 31 Active	Loads: 0
Locations: 5	Meters: 1 ● 1 Active	Plugs: 1 ● 1 Active	VFDs: 0

Lighting			
Occupancy Rate: 0%	Lights On: 0%		

HVAC			
Heating: 0	Idle: 100%	High Indoor Temperature: 105°	
Cooling: 0	Fan On: 0%	Low Indoor Temperature: 65°	
Fan Only: 0	Supplemental HVAC: 0%	Average Indoor Temperature: 79°	
Idle: 2	Keypad Locked: 0%	Outdoor Temperature: 43°	

5.4.2. Adding Devices for the First Time

1. To begin adding devices to your system, on the left navigation bar, click **Settings** > **Device Setup** > **Easy Setup** and follow the instructions on the screen.

The screenshot shows the EnergyCenter BY AUTANI dashboard with the Settings menu open. The Device Setup screen is displayed, showing a welcome message and a list of options to get started. The 'Easy Setup' button is highlighted.

Settings | Site | Contractor | System | Data Maintenance | Energy | Security | **Device Setup**

Network: | Channel: 25 | Status: Network Up | Security: Enabled | Trust Center: No | **Easy Setup** | Device Setup

Welcome to the Device Setup Assistant

This page allows you to configure your appliance and connect devices to its wireless network. Please choose an option below to get started:

Easy Setup

NOTE: For the first device addition, only the “Easy Setup” button will be active on the Device Setup screen.

2. The **Step 1: Create a Network** tab appears. Give a name to your network, and click **Next**.

The screenshot shows the EnergyCenter BY AUTANI dashboard with the Settings menu open. The Step 1: Create a Network screen is displayed, showing a form to enter a network name and a checkbox for security. The 'Next' button is highlighted.

Settings | Site | Contractor | System | Data Maintenance | Energy | Security | **Device Setup**

Network: | Channel: 15 | Status: Network Up | Security: Enabled | Trust Center: No | Allow Join: No | **Step 1: Create a Network** | Step 2: Select Devices | Step 3: Review | Step 4: Finish

Setup Your Appliance

Type a name for your network. Click next to add devices.

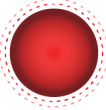
Name: S4SEDHXX **Next**

Security Enabled: ☒

< Back **Next >** Cancel

3. Select devices, review, and click **Finish** to end the process.

4. If the device is an Autani manufactured device with visible LEDs, color changes indicate the status of the device joining the network. Other third party devices will have different LEDs and different status actions.

LED Color		Device Status Description
	Red	When device is powered, it automatically searches for network.
	Amber	Device has found an autaniNet network and is waiting for permission to join.*
	Green	Device has been added to the network and is actively communicating.**

- * A Wireless Relay Controller (WRC) blinks green rapidly (on/off twice a second).
- ** A WRC blinks green slowly (on one second/off one second). For more information, and indicators when in Standalone Mode, see the WRC Installation Guide.
- *** For third party devices, please reference the manufacture's documentation regarding "joining" indicators or procedures.

For the detailed instructions on using the EnergyCenter® software for each kind of device, refer to the **Help** section of the EnergyCenter® software.



 **Devices**

 **Groups**

 **Automation**

 **Energy**

 **Alerts**

 **Analysis**

 **Settings**

 **Help**

 **Load Select**

User Guide

Licensing

About

User's Guide Module

- [Tasks Common to All Applications](#)
- [Custom Scripting](#)
- [StatCenter \(HVAC\)](#)
- [LightCenter](#)
- [MeterCenter](#)
- PLUS
 - [Plug Management](#)
 - [Computer Management](#)
 - [Load Management](#)

Step-by-Step Instructions

Common features to all Autani software products such as:

- Setting up the autaniNet network
- Configuring devices
- Creating groups of devices
- Creating events, schedules, overrides, and curtailments
- Using schedules, overrides, and curtailments
- Generating alert e-mails
- Displaying energy consumption reports and graphs

• Writing custom event rules using PRO

- Configuring thermostats, occupancy sensors, and contact sensors
- Changing thermostat settings and sensor associations
- Displaying historical temperature, setpoints, relay, and consumption

- Configuring lights and occupancy sensors
- Changing light settings and associating occupancy sensors
- Using light level controllers
- Displaying historical changes in a light's status (on/off) and consumption

- Monitoring metered consumption
- Changing meter settings
- Configuring pulse meters
- Displaying historical consumption data

- Controlling and monitoring wireless plug loads using Autani power strips
- Using Autani load controllers
- Controlling computers via Autani power strips or the Autani PC EnergyCenter
- Using computer keyboards as occupancy sensors
- Displaying historical consumption data

5.4.3. Example: Label Devices and Assign Locations

Select **Devices** from the left navigation bar. Click on the applicable tab for your device. From the list of devices, select your device and click on **Details**.

The screenshot shows the 'Devices' page with the 'Meters' tab selected. The left navigation bar has 'Devices' highlighted. The top navigation bar includes 'Dashboard', 'Thermostats', 'Fans', 'Lights', 'Sensors', 'Plugs', 'Meters', and 'Extenders'. The 'Meters' tab is active. Below the tabs, there's a date range selector showing 'Display Readings from: 10/07/2019 to: 10/14/2019' and a 'Show/Hide Energy' link. A table of meters is displayed with columns: Status, Location, Meter, Cost (\$), Consumption, Unit, Meter Type, and Display. The table contains five rows of meter data. The second row, 'E50 Compact Power and Energy Meter - AU164610150', is highlighted. A green arrow points to the 'Details' button at the bottom of the table. The bottom of the page shows pagination: 'Page 1 of 1' and 'View 1 - 2 of'.

The **Details** screen appears with the **General** tab selected. Edit the Name, Description, and Location of the device.

The screenshot shows the 'Details' page for the 'E50 Compact Power and Energy Meter - AU164610150'. The 'General' tab is selected. The page shows fields for 'Name', 'Description', and 'Location'. The 'Name' field contains 'E50 Compact Power and Energy Meter - AU164610150'. The 'Description' field contains 'Digital Metering'. The 'Location' field is a dropdown menu set to 'Electrical Closet'. A green arrow points to the 'Edit' button. The left navigation bar has 'Devices' highlighted. The top navigation bar includes 'Dashboard', 'Thermostats', 'Fans', 'Lights', 'Sensors', 'Plugs', 'Meters', and 'Extenders'. The 'Meters' tab is active.

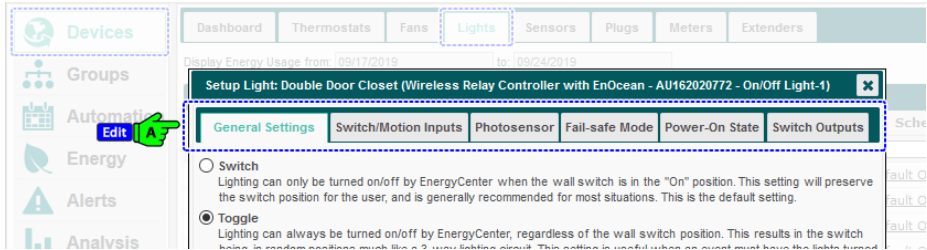
NOTE: For more information, click the **Help** section on the left navigation bar and select the User Guide specific to the device.

5.4.4. Example: Select Device Settings (through Setup)

Select **Devices** from the left navigation bar. Click the applicable device tab, select the desired device, and click **Setup**.

The screenshot shows the 'Devices' page with the 'Lights' tab selected. The left navigation bar has 'Devices' highlighted. The top navigation bar includes 'Dashboard', 'Thermostats', 'Fans', 'Lights', 'Sensors', 'Plugs', 'Meters', and 'Extenders'. The 'Lights' tab is active. Below the tabs, there's a date range selector showing 'Display Energy Usage from: 09/17/2019 to: 4/2019'. A table of lights is displayed with columns: Status, Location, Light, Description, Lighting, and Schedule. The table contains six rows of light data. The fifth row, 'Wireless Relay Controller with EnOcean - A...', is highlighted. A green arrow points to the 'Setup' button at the bottom of the table. The bottom of the page shows pagination: 'Page 1 of 3' and 'View 1 - 2 of'.

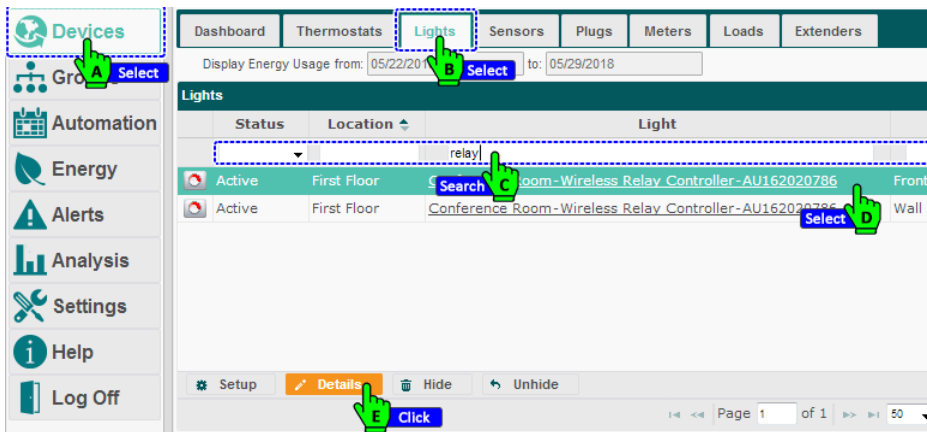
The **Setup** screen appears with the **General Settings** tab selected. Modify the settings as needed across the tabs.



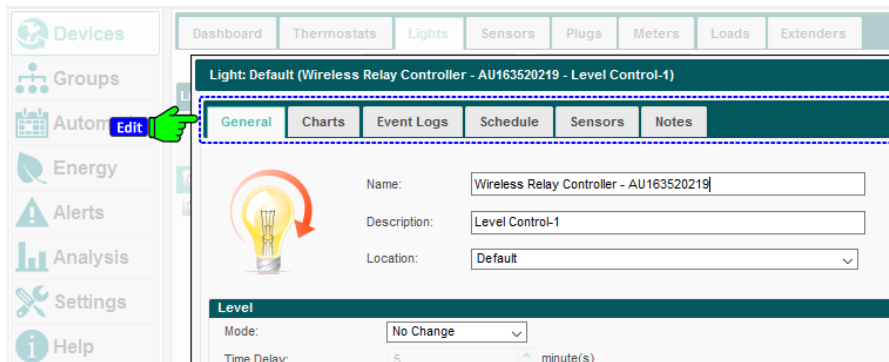
NOTE: For more information, click the **Help** section on the left navigation bar and select the User Guide specific to the device.

5.4.5. Example: Select Device Settings (through Details)

Select **Devices** from the left navigation bar. Click the applicable device tab, select the desired device, and click **Details**.



The **Details** screen appears with the **General** tab loaded by default. Modify the settings as needed across the tabs.



NOTE: For more information, click the **Help** section on the left navigation bar and select the User Guide specific to the device.

5.4.6. Example: Associate Sensors with Devices

Select **Devices** from the left navigation bar. Click the applicable device tab, select the desired device, and click **Details**.

The screenshot shows the 'Lights' details screen. The left navigation bar has 'Devices' selected. The top tabs include 'Dashboard', 'Thermostats', 'Lights', 'Sensors', 'Plugs', 'Meters', 'Loads', and 'Extenders'. The 'Lights' tab is active, showing a table of light devices. A device 'Wireless Relay Controller - AU164220686' is highlighted. The 'Details' button is visible at the bottom.

Status	Location	Light	Description	Lighting
Active	Default	Wireless Relay Controller - AU164220686	Level Control-1	80%
Active	Default	Wireless Relay Controller - AU164220686	Level Control-2	80%
Active	Default	Wireless Relay Controller - AU164220686	On/Off Light-1	On
Active	Default	Wireless Relay Controller - AU164220686	On/Off Light-2	On

The **Details** screen appears with the **General** tab selected. Select the **Sensors** tab and choose the sensors to associate with to your device.

The screenshot shows the 'Sensors' tab in the 'Details' screen. The 'Sensors' tab is selected, showing a table of sensors. A sensor 'Conference Room - Wireless Relay Controller-AU162020786' is highlighted. The 'Select' button is visible at the bottom.

Location	Sensor	Description
Conference Room	Conference Room - Wireless Relay Controller-AU162020786	Occupancy Sensing-1
Conference Room	Occupancy Sensing - 019FF914	EnOcean Occupancy Se
Conference Room	Conference Room - Wireless Relay Controller-AU162020786	Occupancy Sensing-2

NOTE: For more information, click **Help** on the left navigation bar and select the User Guide *Tasks Common to All Applications* and, if needed, the User Guide specific to your device.

5.4.7. Example: Create Groups

From the left navigation bar, select **Groups**. The **Groups** screen appears with the **Groups** tab selected by default. Click on **New** to create a Group.

The screenshot shows the 'Groups' screen. The left navigation bar has 'Groups' selected. The top tabs include 'Groups' and 'Views'. The 'Groups' tab is active, showing a table of groups. A 'New' button is visible at the bottom.

Group Name	Number of Devices	Group Type
3rd Party Testing	0	Location
Admin Office	17	Location
Bob's Office	7	Location
Casey's Cube	0	Location
Default	177	Location
DLJ Cube	8	Location
Double Door Closet	4	Location
Doug M's Office	8	Location
Lab	15	Location

NOTE: For more information, click **Help** on the left navigation bar and select the User Guide *Tasks Common to All Applications* and, if needed, the User Guide specific to your device.

5.4.8. Example: Set Up Email Alert Notifications

From the left navigation bar, select **Alerts**. The Alert screen appears with the Recent Alerts tab displayed by default. Select the next tab **Alert Setup** and click on **New** to create an alert.

Devices

Groups

Automation

Energy

Alerts

Analytics

Settings

Help

Log Off

Recent AlertsAlert Setup

Name	Trigger an alert when	Limit to	State
HBS_occupancy	Occupancy Sensin...	Occupancy detected from Monday at 1...	Once an ... Disabled
test	All Contact Sensors	Battery is low	Once an ... Enabled

New

Edit

Delete

NOTE: For more information, click **Help** on the left navigation bar and select the User Guide *Tasks Common to All Applications* and, if needed, the User Guide specific to your device.

6. Troubleshooting

❑ Not able to achieve remote access

- ❑ Reach out to your IT Administrator.
- ❑ Does the customer’s firewall filter outbound traffic? (Y/N) If yes, one of the following ports below will need to be opened between the local IP address of the Autani Manager/CORE and our web portal at www.autani.net.

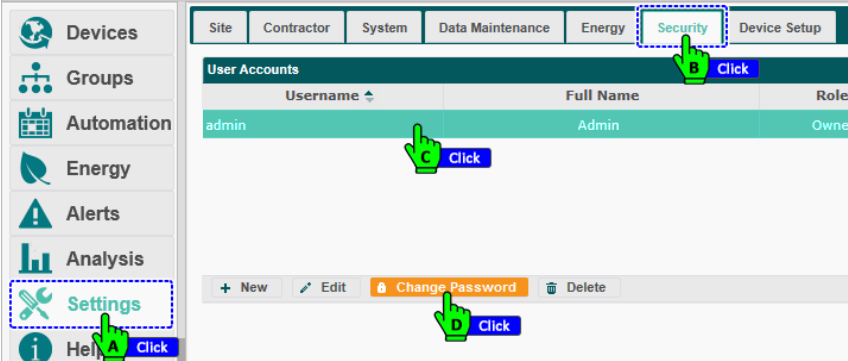
A port forward may need to be set up between the local IP address of each Autani Manager/CORE on the client’s LAN and the IP address of Autani’s web portal www.autani.net / www.mywebcomfort.net (167.88.116.104 or 167.88.116.105) per the table below when a client’s firewall is filtering outbound traffic.

Only 1 of the 4 ports below needs to be opened to establish a remote connection. Note that it may take up to 30 minutes for the remote connection to be establish after opening a port on the firewall.

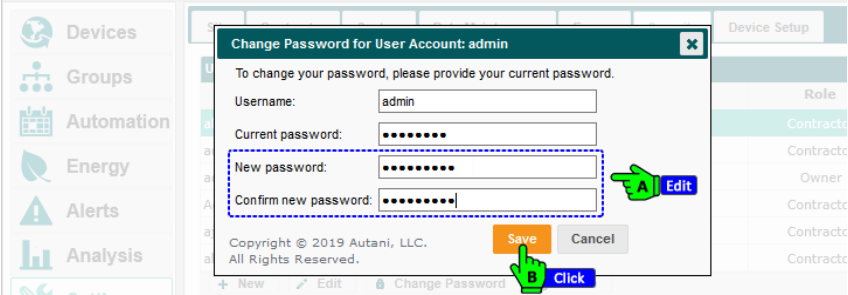
IP Address	Protocol	Port
167.88.116.104	UDP	54261
		59370
		59371
167.88.116.105	TCP	443

❑ Changing the password

To change the password for an account: click **Settings** on the left navigation bar, select the **Security** tab, select the admin user account and click **Change Password**.



Enter a new password and click **Save**.



Contact Information

□ **Autani Support**

Phone: 443.320.2233 x2

Address: 7090 Columbia Gateway Drive, Suite 140, Columbia, MD 21046

Support/Commissioning Services: support@autani.com

□ **Autani Sales**

Phone: 443.320.2233 x1

Sales/Quotations: sales@autani.com, quotes@autani.com

General Inquiries: information@autani.com

Hours of Operation: Monday to Friday, 9am to 5pm, Eastern Standard Time



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