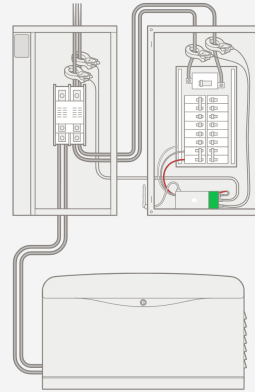


# Wiser Energy with Generator



## Safety Precautions

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.



### HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70, CSA Z462, or NOM 029-STPS.

This equipment must only be installed and serviced by qualified electrical personnel.

Turn off all power supplying this equipment before working on or inside equipment.

Always use a properly rated voltage sensing device to confirm power is off.

Replace all devices, doors, and covers before turning on power to this equipment.

Beware of potential hazards, and carefully inspect the work area for tools and objects that may have been left inside the equipment.

**Failure to follow these instructions will result in death or serious injury.**

The Wiser Energy System has been tested and certified for use with Square D™ circuit breakers, load centers and combination service entrance devices (CSEDs) as installed per this manual.

For use in non-Square D load centers and CSEDs please consult with the manufacturer for compatibility.

## Specifications

### Technical Specifications

Wiser Energy is a home energy monitoring device. It is used to measure the current and voltage on the service mains. The device monitors two phases of 120 VAC. If installed outside, it must be kept dry and within specified temperature ranges.

### Current Sensor Specifications

CAT IV 250 V 200 A max  
Cable length: 46 in. | Inside diameter: 0.95 in.  
May be used on uninsulated conductors

### Monitor Specifications

Compatibility: 120 VAC (90 V–130 V)  
Power Use: < 5 Watts, 0.1 amps  
Wi-Fi: 2.4 GHz 802.11b/g/n  
Size: 137 mm x 66 mm x 32 mm  
Weight: 200 g

### Climate Specifications

RH <90%; IPx0 rating  
Temperature: 32 – 154.4 °F (0 – 68 °C)  
Elevation < 6,561 ft. (<2,000 m)

## Legal

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. Operation is subject to these conditions:

1. It may not cause harmful interference.
2. It must accept any interference received, including interference that may cause undesired operation. If it is not installed and used as per the instructions, it may cause interference which is harmful to wireless communications. There is no guarantee that interference will not occur in a particular installation. If it does cause interference we recommend: reorienting or relocating the receiving antenna, or increasing the separation between the device and the receiver.

3. Patents: [sense.com/patents](https://sense.com/patents)



Certified to CSA STD C22.2 No. 61010-1  
Conforms to UL STD 2808  
Conforms to UL STD 61010-1  
Conforms to UL STD 61010-2-032  
Conforms to CAN ICES-3(B)/NMB-3(B)

## Wiser Energy components



Wiser Energy  
Monitor



Current Sensors



Current Sensors



Power Cable



Antenna Assembly



Mounting Bracket  
(optional)

## Instructions

### 00 Check the generator setup

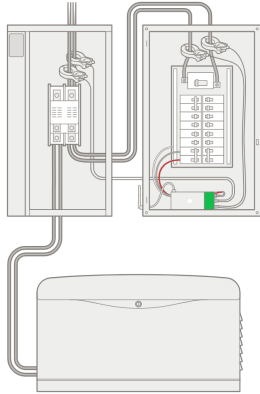
Please follow the instructions for the specific generator setup type. Wiser Energy supports the following configurations:

Generator powering main panel

Generator powering subpanel

The generator powers the main panel and is wired into a service-entrance automatic transfer switch (ATS). In this setup, the Wiser Energy monitor must be installed in the main panel itself.

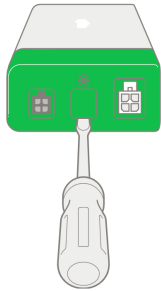
Sensor cable extensions may be needed in order to reach the ATS panel. Extensions can support distances up to 80 feet. Contact [customer support](#) to get extensions.



### 01 Open the middle port

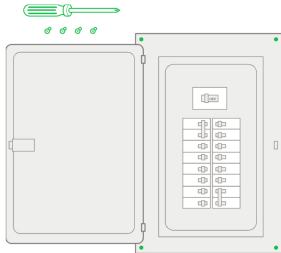
Already have Wiser Energy installed? Skip to [step 2](#) to remove power to the Wiser Energy monitor before opening the middle port.

Using a flathead screwdriver, pry open the cap on the middle port of the Wiser Energy monitor. This will be used to connect the generator sensors.



### 03 Remove panel covers

1. Apply appropriate PPE.
2. Remove the load center screws and covers for the necessary panels based on the generator setup type ie; the main panel and the ATS box or subpanel.
3. Measure the voltage from each line to neutral and from line to line to confirm that all power is OFF.



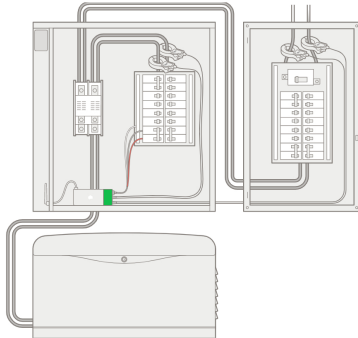
### 05 Install the antenna

Using the back of a screwdriver, punch out the knockout cover in the electrical panel. Then, insert the antenna.

The generator only powers a critical load subpanel. In this setup, the Wiser Energy monitor must be installed in the same subpanel. The automatic transfer switch (ATS) could be within or external to the subpanel.

Please ensure the home's Wi-Fi router and modem are also powered by the same subpanel so that the monitor can remain online when the home is being powered by the generator.

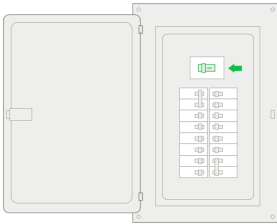
Please contact [customer support](#) to get sensor extension cables if needed.



### 02 Turn OFF power

Installation of the Wiser Energy System requires removal of all power. Be sure to provide an alternate light source before beginning the installation procedures. Do not begin the installation procedures until all power is completely removed from the equipment including any alternate power sources.

1. Turn OFF the main feeder disconnects that supply power to both electrical panels, or if the installation uses the revenue meter for isolation, arrange for the utility provider to remove power. If a main feeder disconnect is not present and the revenue meter cannot be used as an isolation device, contact the utility company for removal of power. If the generator is powering a critical load subpanel, ensure the subpanel is also turned off.
2. Turning OFF only the main circuit breaker is insufficient to remove power completely from the panel. Line side connections will still be live.
3. Apply the appropriate lockouts to the disconnecting means.
4. Turn OFF all alternate power sources connected to the equipment.



### 04 Find a spot for the Wiser Energy monitor

The Wiser Energy monitor is designed to fit within an electrical panel in order to monitor a home's energy consumption.

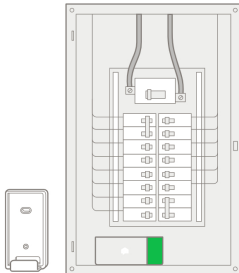
If the generator is powering the main panel, find a spot for the monitor in the main panel.

or

If the generator is powering a subpanel, find a spot for the monitor in the same subpanel.

Note: If there is no open space available, use an external enclosure following NEC® and local standards.

Already have Wiser Energy installed? First open your monitor's middle port according to [step 1](#), then skip to [step 8](#).



### 06 Connect

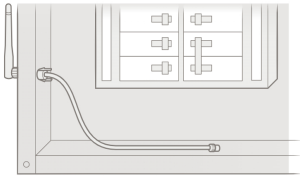
Connect the power cable, antenna, and current sensors to the monitor. Be sure to insert the sensors into the outer port. The middle port is for generator sensors.

**DANGER**

HAZARD OF ELECTRIC SHOCK EXPLOSION, OR ARC FLASH

Maintain 1 in. (25mm) minimum separation between the monitor and antenna extension assembly to load center parts (bus, stabs, circuit breakers, and power wires).

Failure to follow these instructions will result in death or serious injury.

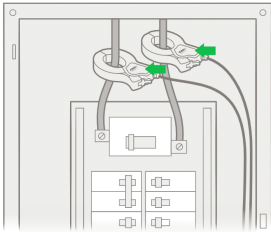


07 Clamp sensors around service mains

As a precaution, first plug the sensors into the Wiser Energy monitor.

Clamp the current sensors around the service mains so that both Wiser Energy labels face the same direction. The direction of the labels on the sensors should face the power source. Once placed in the final orientation, push the sensor lock in until you hear a click.

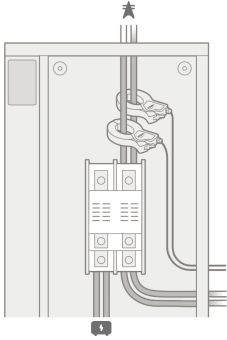
As a precaution, first plug the sensors into the Wiser Energy monitor.



09 Clamp the generator sensors

If the generator is powering a main panel:

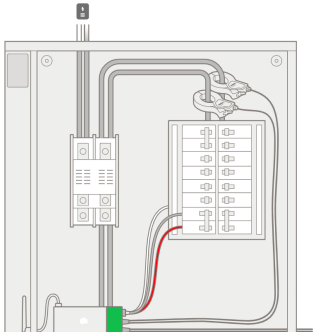
Clamp the sensors around the service line that is entering the ATS so that both sensor labels are facing the same direction. The sensor labels should face the power source. Once placed in the final orientation, push the sensor lock in until you hear a click.



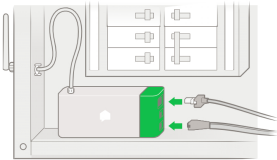
In case your sensors do not fit around the service line, you can clamp the sensors around the generator lines that feed into the ATS so that both labels are facing the same direction. The sensor labels should face the power source, in this case, the generator.

If the generator is powering a subpanel:

Clamp the sensors around the load output of the ATS so that both sensor labels are facing toward the ATS. In this setup, the ATS may be within or external to the subpanel. Once placed in the final orientation, push the sensor lock in until you hear a click.



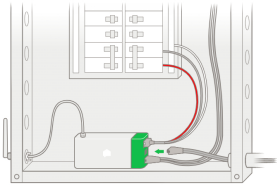
08 Connect the generator sensors



08 Connect the generator sensors

Connect the generator sensors to the middle port on the monitor.

Follow local code and best practices for interconnecting multiple electrical panels.



10 Connect the power wires

Already have Wiser Energy installed? Skip to [step 11](#).

(compatible with Square D 15 – 30 A thermal magnetic circuit breakers).

Dedicated Circuit Breaker Method

In the panel where you placed your Wiser Energy monitor, add a new Square D brand two-pole 15 – 20 A circuit breaker into the load center. With circuit breaker OFF, connect the black power wire to one circuit breaker terminal and connect the red wire to the other terminal.

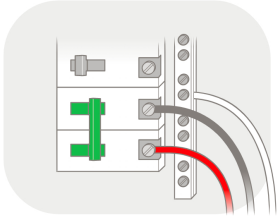
Two Wire Rated Lug Method

Existing Square D brand 15 – 30 A thermal magnetic two-pole circuit breakers in the load center have terminals that can accept two conductors. With the circuit breaker OFF, use half of the clamp plate for load wire and the other half for Wiser Energy power wire.

Pigtail Wire Method

With the circuit breaker OFF, create a splice connection to the two-pole circuit breaker following the NEC and circuit breaker manufacturer guidelines for splice connector type and wire size.

Note: For all three methods, attach a white wire to an appropriately sized terminal on the neutral bus bar.



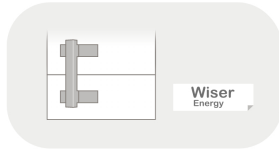


What if the sensor cables are not long enough?

Contact [customer support](#) to get sensor extension cables, which can support distances up to 80 feet.

#### 11 Close the panel

Replace the panel covers carefully to ensure that there is no pressure on the current sensor clamps that would cause them to open. Label the Wisen Energy circuit breaker with the included sticker.



#### 12 Turn power on, wait for chime

Once both panels are closed, restore power to the panels and listen for one minute for one of the following sounds:

Visit [help](#) for troubleshooting.



**Success Chime:** Installation was successful!



**Repeating Beep:** There is an installation problem. Check cable connections.



**No Sound:** The Wisen Energy monitor cannot start. Check power cable connections.

#### 13 Use the app to complete setup

Install the Sense app. Tap "Get Started" and follow the on-screen instructions. The app will guide you through the Wi-Fi setup and account creation process.

##### Upgrading standard setup to monitor a generator?

Go to Settings / My Home / Connected Devices and select "Generator" within Sensor Sources.

