

 sense[®]solar

Warning

Sense is connected to dangerous voltages. Improper use or installation can be dangerous or even fatal. Please make sure to follow these guidelines:

1. The installation should be conducted by a qualified professional, according to local electrical codes.
2. Personal protective equipment should be worn when installing a current sensor on a conductor exposing hazardous live voltages. If the current sensors are used in a manner other than specified, the safety protection provided may be impaired.
3. Do not try to open the Sense monitor, touch any internal parts, or try to repair it.
4. If you believe the monitor, sensors, or cables may have been damaged, do not try to use them.
5. Use the Sense monitor only in the United States and Canada, and only with a 60Hz 120V/240V split phase system.
6. Install the Sense monitor where it will not be exposed to direct sunlight or extremely low or high temperatures. No exposure to water. RH < 90%; Elevation < 2000 meters; Temperature 0 - 68°C.

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

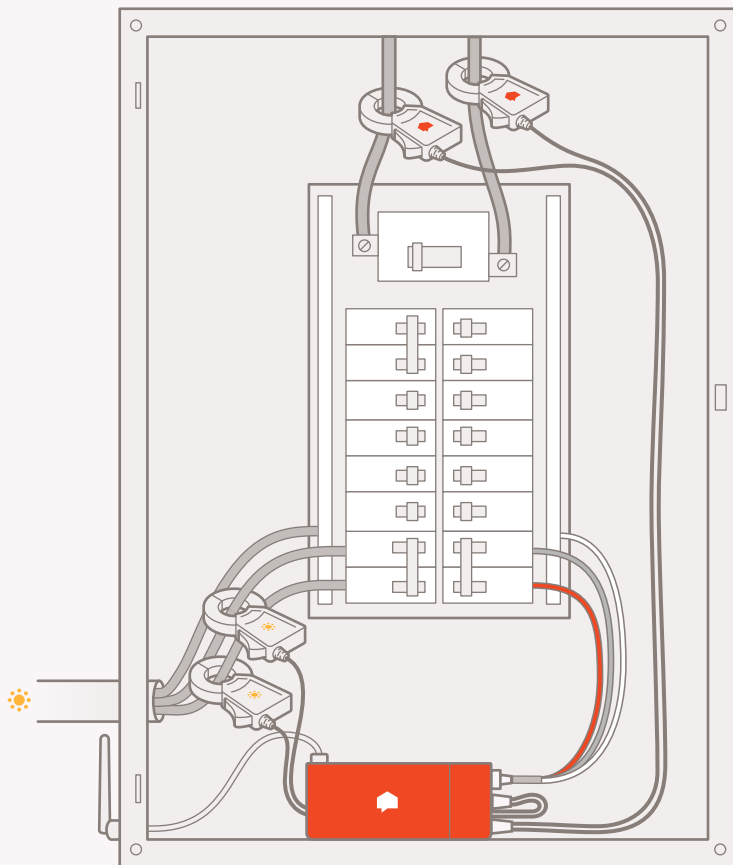
Questions?

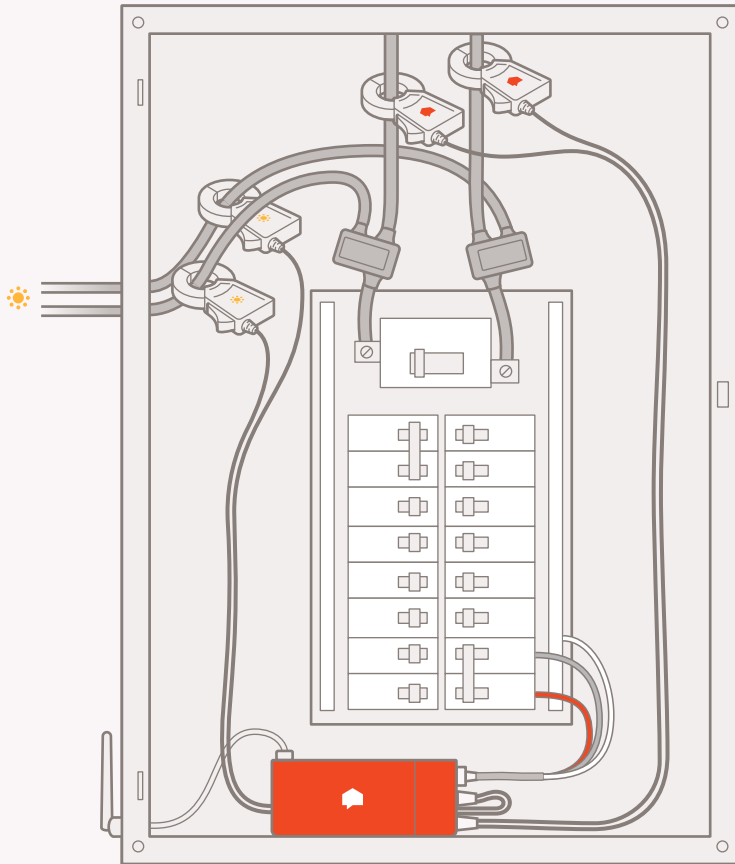
Go to help.sense.com.

Designed by Sense in Cambridge, MA
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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)





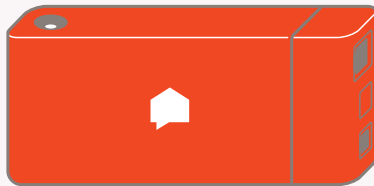
Instructions

1. Install the Sense monitor
2. Install app at sense.com/app
3. Tap “Get Started” in the app
4. Use the app to complete setup

When installing Sense, you must be generating at least 150 watts to calibrate the system correctly. If upgrading to solar, do not remove the existing sensors. Check compatibility at sense.com/works.



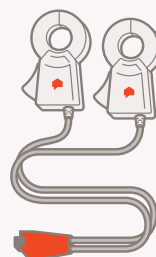
External mounting kit*
Screws only for external use



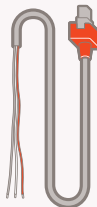
Sense monitor



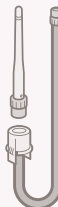
Solar sensors



Current sensors



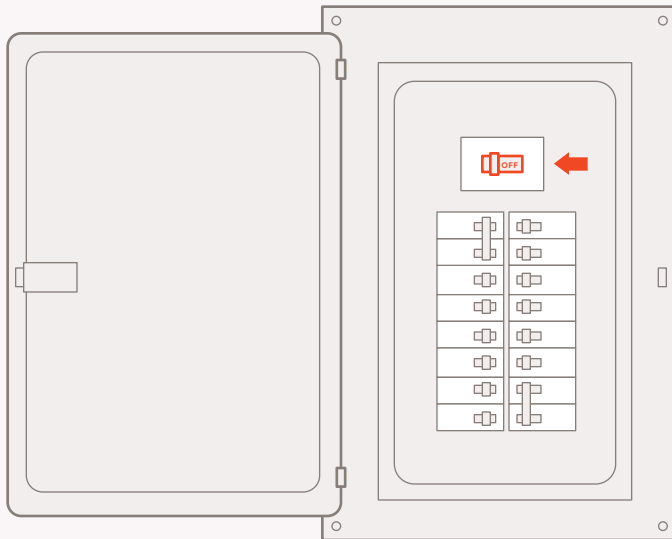
Power cable



Antenna kit

01 Turn off power

Open the door to the electric panel and turn off the main breaker and power to the incoming solar feed. This helps protect you during installation. Don't forget your flashlight!

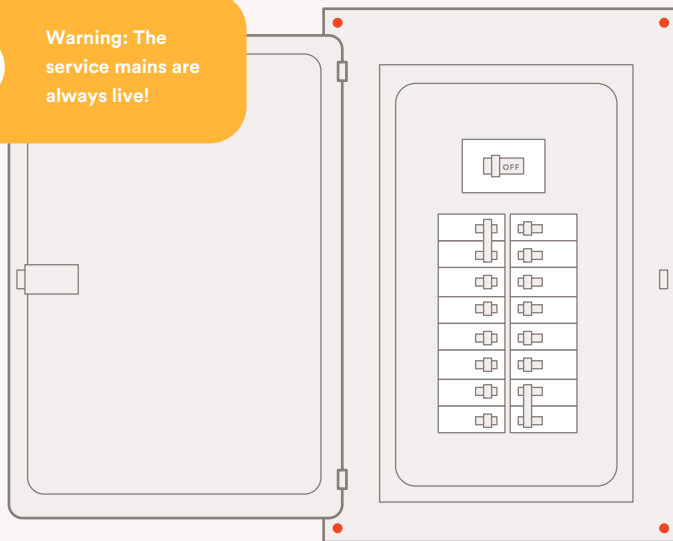


02 Remove panel cover

Remove the screws securing the panel cover to access the circuit breakers. If solar is in a subpanel, remove the subpanel cover.



Warning: The service mains are always live!

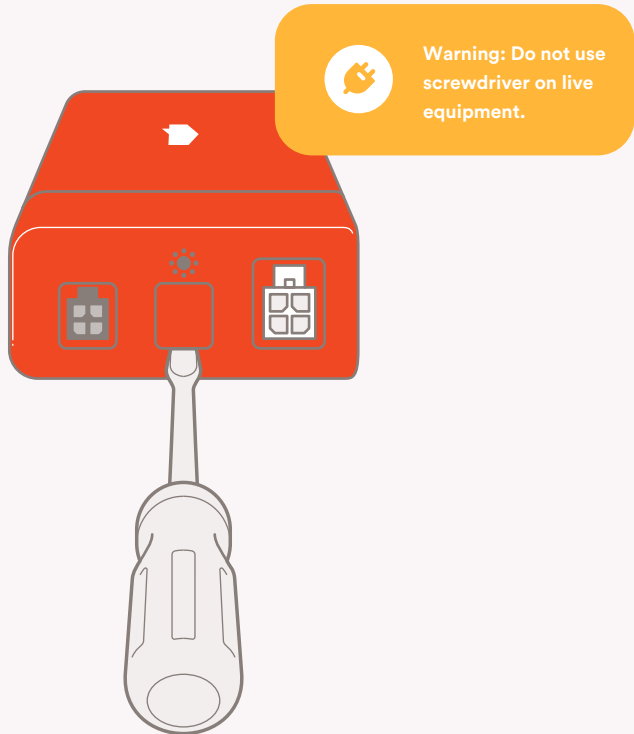


03 First time installing Sense?

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

Upgrading current setup to solar?

Ensure the power is off before prying open the middle port.
Then skip to step 8.



04 Find a spot for your Sense

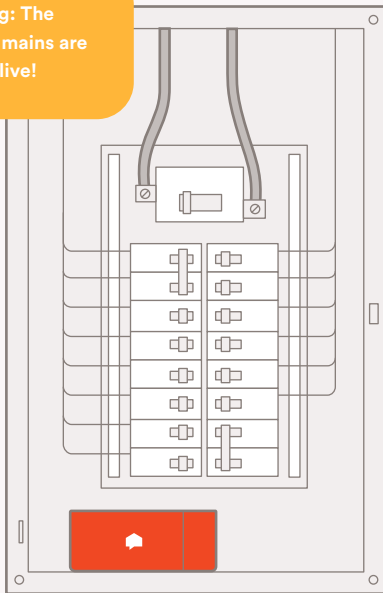
The Sense monitor is designed to fit within your main panel in order to monitor your whole home energy consumption. Find an open spot that works for you.

What if there is no room?

Use the mounting bracket provided. See more installation configurations at help.sense.com.



Warning: The service mains are always live!



05 Install the antenna

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

Antenna



Knob



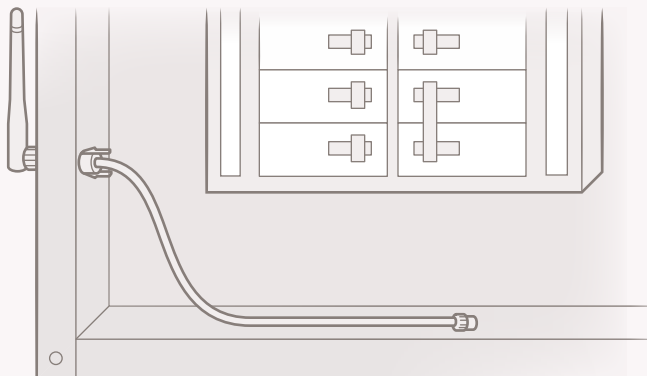
Insert



Extension cable

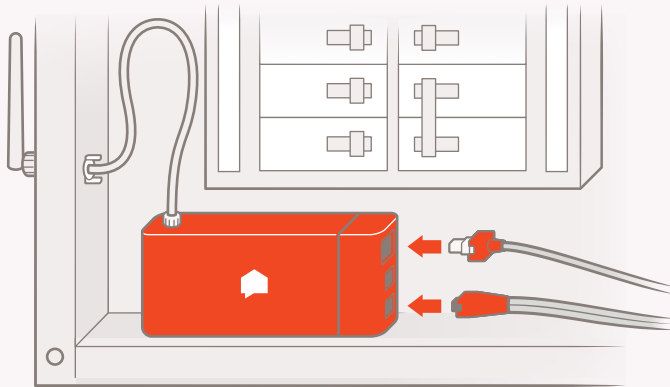


Extension cable knob



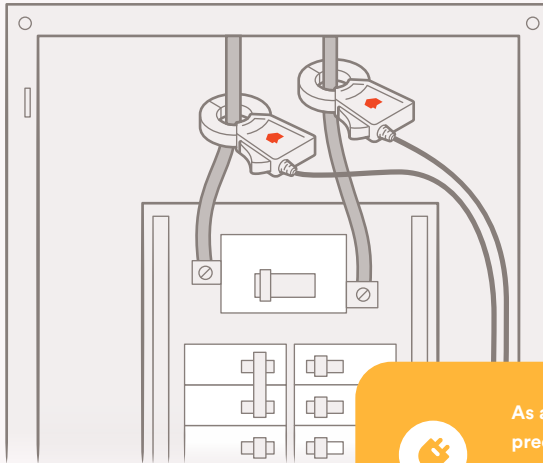
06 Connect

Connect the power cable, antenna, and current sensors to the monitor. The solar sensors, labelled ☀️ should only be used for solar. Insert the current sensors into the outer port. The middle port is only for solar sensors.



07 Clamp sensors around service mains

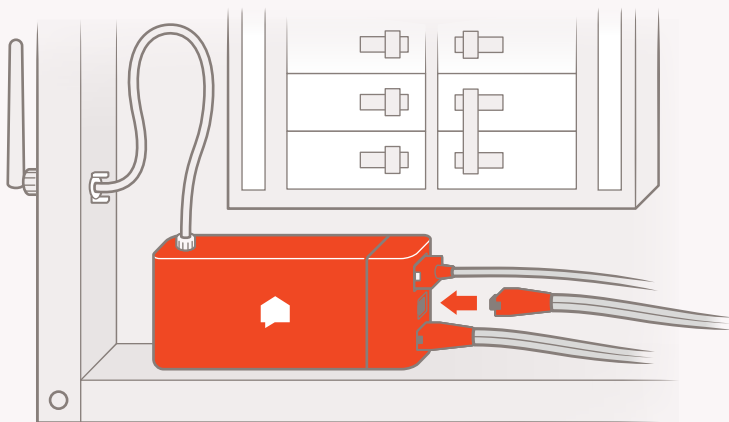
Clamp the current sensors around the service mains so that both Sense labels face the same direction. The direction of the sensors does not matter, as long as they are the same.



As a safety precaution, first plug the sensors into the Sense monitor.

08 Connect the solar sensors

Connect the solar sensors, labeled with the ☀️ to the middle port on the monitor.

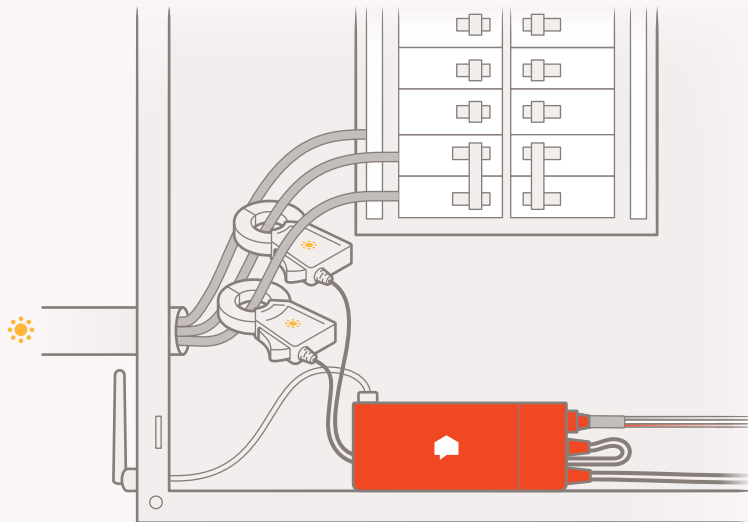


09 Clamp the solar sensors

Clamp the solar sensors around the wires to the incoming solar feed so that both labels face the same direction. The direction of the sensors does not matter, as long as they are the same.

Upgrading current setup to solar?

Please skip to step 11.

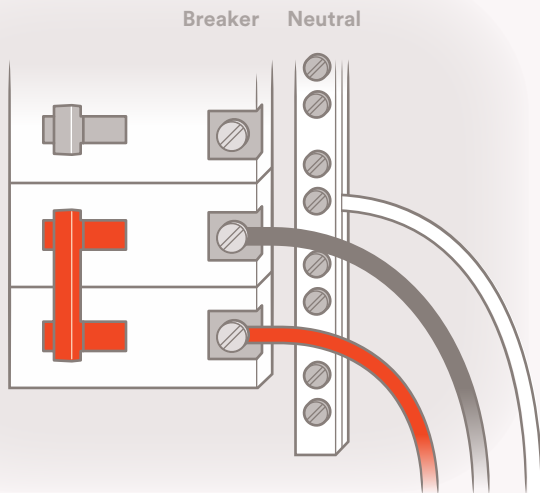


10 Connect the power

Connect the **black wire** and the **red wire** to an empty 240V breaker and the white wire to the neutral bus bar. Sense draws less than 0.1A, so you should use the smallest 240V breaker available for your panel.

Don't have an empty breaker?

Connect to an existing or add a new 240V breaker. Do not use a tandem breaker, unless it is 240V. Learn more at help.sense.com.

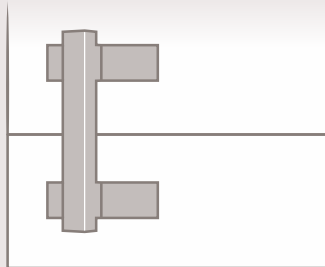


11 Close the panel

Replace the panel cover carefully to ensure that there is no pressure on the sensor clamps that would cause them to open. Label the Sense breakers with the included sticker.

Doing electrical work?

Reattach each sensor to the same service main as before to avoid disrupting device detection.



12 Turn power on, wait for chime

Once the panel is closed, turn the main breaker back on, and listen for one of the sounds listed below. It will take about a minute before hearing a sound. Visit help.sense.com for sound samples and troubleshooting information.

Moving? Take Sense with you.

Using the app, reset your data. Follow all safety precautions. Turn off power to the main breaker and solar feed. Disconnect the sensors from the service mains and solar feed. Disconnect all cables from the monitor. Remove the antenna and disconnect the power cable. Contact Sense to reset your data.



Success Chime

Installation looks good!
Sense is ready for setup.



Repeating Beep

There is an installation problem.
Check cable connections.



No Sound

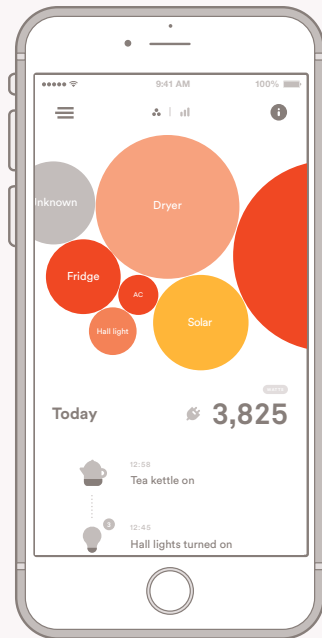
The Sense monitor cannot start.
Check power cable connections.

13 Use the app to complete setup

Install the Sense app by visiting sense.com/app. Click “Get Started” and follow the on-screen instructions. The app will guide you through the Wi-Fi setup and account creation process.

Upgrading to solar?

Go to Settings / Sense Monitor / Setup Solar and follow the solar setup procedure.



Caution: The Sense monitor should be installed by a qualified professional. Before installing, please read and review the safety warnings.



Technical Specifications

Sense is a home energy monitoring device. It is used to measure the current and voltage on the service mains. It monitors two phases of 110/120VAC. If installed outside, it must be kept dry and within specified temperature ranges.

Current Sensor Specifications

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

Monitor Specifications

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

Climate Specifications

RH <90%; IPx0 rating
Temperature: 0-68°C
Elevation < 2,000m

See what's up. Know what's on.™