

INSTALLATION INSTRUCTIONS

# Sense with 400A Split Service



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

Legal

**Tech Specs** 

What's in the box?





Sense monitor

Main current sensors



Flex add-on sensors Labeled with solar stickers



Power cable





Antenna assembly

External mounting kit

# Instructions

Sense can support split-service systems up to 400A (200A per panel). You may need sensor cable extensions or additional current sensors in order to connect your second panel to your Sense monitor. Sensor extension cables can support distances up to 80 feet. Learn more about sizing extension cables here.

Please note that these instructions are for split-service systems and do not apply to dual-panel systems consisting of a main panel and a subpanel. Sense can work with subpanels out of the box, without need for additional sensors.

# 01 Turn off power

Open the doors to each panel and turn off both main breakers. This helps protect you during installation. Don't forget your flashlight!



# 02 Remove panel cover

For each panel, remove the screws securing the main panel cover in order to access the circuit breakers.

Warning: The service mains are always live!





# 03 Open middle port

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

#### Upgrading current setup to monitor a second panel?

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

Warning: Do not use screwdriver on live equipment



# 04 Find a spot for Sense

The Sense monitor is designed fit within one of your panels in order to monitor your home's energy consumption. Find an open spot that works for you.

# Difficulty finding space?

Use the mounting bracket provided to install Sense at the top of your electrical panel or outside of the panel. See mounting bracket instructions here and then return to this guide.

Warning: The service mains are always live!



# 05 Install the antenna

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

If you're installing Sense in a recessed electrical panel, use the top or bottom knockouts, depending on where your monitor is placed in the panel. In most cases, Wi-Fi signal quality should still be acceptable with the antenna located behind the wall.



# 06 Connect to monitor

In the same panel where you placed your Sense monitor, connect the power cable, antenna, and main sensors to the monitor. Please ensure that the sensors are inserted in the monitor's outer port.

Please check the label and ensure you are connecting the correct sensors. One set will be labeled on the underside with solar stickers. These should be used for your second panel in step 8.



# 07 Clamp sensors around service mains

In the same panel, clamp the sensors around the service mains so that both stickers are facing towards the power source.

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



# 08 Connect Flex sensors to middle port

Insert the Flex add-on sensors into the middle port on the monitor.

Please check the label and ensure you are connecting the correct sensors. Sensors with a solar sticker are used to monitor a second panel.

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



# 09 Clamp sensors around service mains in second panel

In the second panel, clamp the sensors around the service mains so that both Sense logo stickers are facing towards the power source.

#### What if the sensor cables are not long enough?

You may need sensor cable extensions in order to connect your second panel to your Sense monitor. Sensor extension cables can support distances up to 80 feet.

Ensure that the Sense logo stickers (NOT the solar stickers) face towards the power source.



# 10 Connect the monitor power cable in the main panel

If your monitor is already installed, skip to step 11.

In the panel where you placed your Sense monitor, find the monitor power cable connected to the top port of the Sense monitor. 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 main 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.



#### 11 Close the panel covers

Before closing your electric panel, take photos of your installation, just in case you need to contact Support.

Replace the panel covers in your electrical panels carefully to ensure that there is no pressure on the sensor clamps that would cause them to open. Label the Sense breaker with the included sticker.

#### Doing electrical work?

Reattach each sensor to the same service main as before to avoid disrupting device detection. Be sure to place each sensor in the same orientation as before. Failure to do so may result in data inaccuracies.



# 12 Turn power on, wait for chime

Once both panels are 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 for sound samples and troubleshooting information.

Success **Success Chime:** Installation looks good! Sense is ready for setup.

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

Success **No Sound:** The Sense monitor cannot start. Check power cable connections.

# 10 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 to 400A Split Service?

Go to Settings / My Home / Connected Devices and select "400A Split Service" within Sensor Sources.

