Dedicated Circuit: 2 Loads

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

Sense can monitor up to two 120V or 240V circuits. This feature is designed to monitor circuits that have a single device or appliance on them. If you monitor a circuit with multiple devices, they will show as a single device in the Sense app.

Please ensure your Flex sensor cable is plugged into your Sense monitor before installing your sensors.

What do you want to monitor?

Monitoring two 120V loads

Monitoring two 240V loads

Monitoring a 120V load and a 240V load

Monitoring two 120V loads

Instructions:

1. Find the first load you want to monitor in your electrical panel and turn off the breaker to the load.

2. Clamp one Flex sensor around the single ungrounded conductor attached to the breaker identified in step 1. The direction of the Sense logo sticker on the sensor must face the circuit breaker.

NOTE: GFCI and AFCI breakers may be connected directly to the neutral bus with an additional wire. That wire should be ignored for the purposes of this installation.

3. Find the second load you want to monitor in your electrical panel and turn off the breaker to the load.

4. Clamp one Flex sensor around the single ungrounded conductor attached to the breaker identified in step 3. The direction of the Sense logo sticker on the sensor must face the circuit breaker.

5. Write down the names of the devices you'll be monitoring and that they're both 120V loads. You'll need this information during in-app setup.

Ensure both breakers are still in the ‘off’ position before returning to the core installation guide.
Monitoring two 240V loads

Sense can monitor two 240V loads using a single CT per load if they are balanced 240V-only loads with no connection to the neutral bus (not 240V/120V loads which are connected to the neutral bus). Your installer should be able to tell if the load is connected to the neutral bus.

While exceptions exist, you can often identify a 240V-only load by looking at the ungrounded conductor colors at the breaker: If you see a black and a white (usually with a black or red stripe) conductor, it’s likely a 240V-only circuit with no connection to neutral. If you see a black and a red conductor, it’s likely connected to neutral and cannot be set up with this method. For advanced installations, please see the Advanced Dedicated Circuit Monitoring installation guide.

This method should not be used if monitoring only one load and that load is 240V. Please use the single CT method if monitoring a single 240V load. This method works with both 240V-only and 240V/120V loads.

Instructions:

1. Find the first 240V-only load you want to monitor in your electrical panel and turn off the breaker to the load.

2. Clamp one Flex sensor around either ungrounded conductor attached to the breaker identified in step 1. It does not matter which conductor the sensor is attached to. The direction of the Sense logo sticker on the sensor must face the circuit breaker.

   **NOTE:** GFCI and AFCI breakers may be connected directly to the neutral bus with an additional wire. That wire should be ignored for the purposes of this installation.

3. Find the second 240V-only load you want to monitor in your electrical panel and turn off the breaker to the load.

4. Clamp one Flex sensor around either ungrounded conductor attached to the breaker identified in step 3. It does not matter which conductor the sensor is attached to. The direction of the Sense logo sticker on the sensor must face the circuit breaker.

5. Write down the names of the devices you’ll be monitoring and that they’re both 240V-only loads. You’ll need this information during in-app setup.

   *Ensure both breakers are still in the ‘off’ position before returning to the core installation guide.*
Monitoring a 120V and a 240V load

In many cases, it is possible to monitor a 240V load using a single CT. This method can only be used if the load is a 240V-only load with no connection to the neutral bus (not a 240V/120V load which is connected to the neutral bus). Your installer should be able to tell if the load is connected to the neutral bus.

While exceptions exist, you can often identify a 240V-only load by looking at the colors of the ungrounded conductors attached to the breaker: If you see a black and a white (usually with a black or red stripe) conductor, it’s likely a 240V-only circuit with no connection to neutral. **If you see a black and a red conductor, it’s likely connected to neutral and cannot be set up with this method.** For advanced installations, please see the Advanced Dedicated Circuit Monitoring installation guide.

Instructions:

1. Find the **120V load** you want to monitor in your electrical panel and turn off the breaker to the load.

2. Clamp one Flex sensor around the single ungrounded conductor attached to the breaker identified in step 1. The direction of the Sense logo sticker on the sensor **must** face the circuit breaker.

**NOTE:** GFCI and AFCI breakers may be connected directly to the neutral bus with an additional wire. That wire should be ignored for the purposes of this installation.

3. Find the **240V-only load** you want to monitor in your electrical panel and turn off the breaker to the load.

4. Clamp one Flex sensor around either ungrounded conductor attached to the breaker identified in step 3. It does not matter which conductor the sensor is attached to. The direction of the Sense logo sticker on the sensor **must** face the circuit breaker.

5. Write down the names and type (120V, 240V-only) of the devices you’ll be monitoring. You’ll need this information during in-app setup.

*Ensure both breakers are still in the ‘off’ position before returning to the core installation guide*