

# emporía



## VUE

Smart Home  
Energy Monitor

Solar Supplement



**WARNING!** The Emporia Vue requires installing transformers inside your home's electrical panel and working around dangerous voltage that could lead to injury or death. Emporia recommends that installation be performed by a skilled person such as a licensed electrician or other qualified professional in accordance with the regional electrical code where it is being installed.

Improper installation or use of the equipment can be dangerous or even fatal. In no event shall Emporia be liable to you or any third party for any damages, either direct or indirect, arising from or related to any personal injury as a result of your failure to follow the safety information and instructions in this Installation Guide.

*Note: 3.5mm and 2.5mm ports should only be used to connect the supplied CT clamps to the energy monitor. They are not intended to carry any audio signal.*

*Remarque: les ports 3,5 mm et 2,5 mm ne doivent être utilisés que pour connecter les pinces CT fournies au moniteur d'énergie. Ils ne sont pas destinés à transporter un signal audio.*

## Safety information

- Personal protective gear should be worn when installing the Emporia Vue.
- Do not use the Emporia Vue in any manner other than specified in this installation guide.
- Do not attempt to open, disassemble, or repair any of the components of the Emporia Vue.
- If you believe any of the Emporia Vue components may have been damaged, do not attempt to use them.
- Do not install the Emporia Vue in environments with explosive gas or vapors; nor in damp or wet environments; nor in direct sunlight; nor where temperatures are consistently below  $-40^{\circ}$  F ( $-40^{\circ}$  C) or above  $122^{\circ}$  F ( $50^{\circ}$  C).
- Ensure the Emporia Vue does not have power during any handling, including installation and disassembly.

## Need help?

-  [emporiaenergy.com/support](https://emporiaenergy.com/support)
-  [support@emporiaenergy.com](mailto:support@emporiaenergy.com)
-  1-844-EMPORIA (367-6742)

# Vue solar installation

The Emporia Vue is capable of monitoring your solar production. You will install your Vue differently depending on whether your solar is a **breaker-fed** or a **line-side tap** installation. These installations are covered in the subsequent pages. If you are interested in monitoring how much energy you are pulling and sending back to the grid, you'll need to utilize 50A CTs as described below.

## Net metering



The 200A CTs that connect to your mains will provide net metering out of the box — displaying electricity used minus electricity produced. To ensure the Vue can correctly measure net metering, the 200A CTs must be correctly oriented and be placed between the meter and the incoming solar.

## Energy in from and out to grid



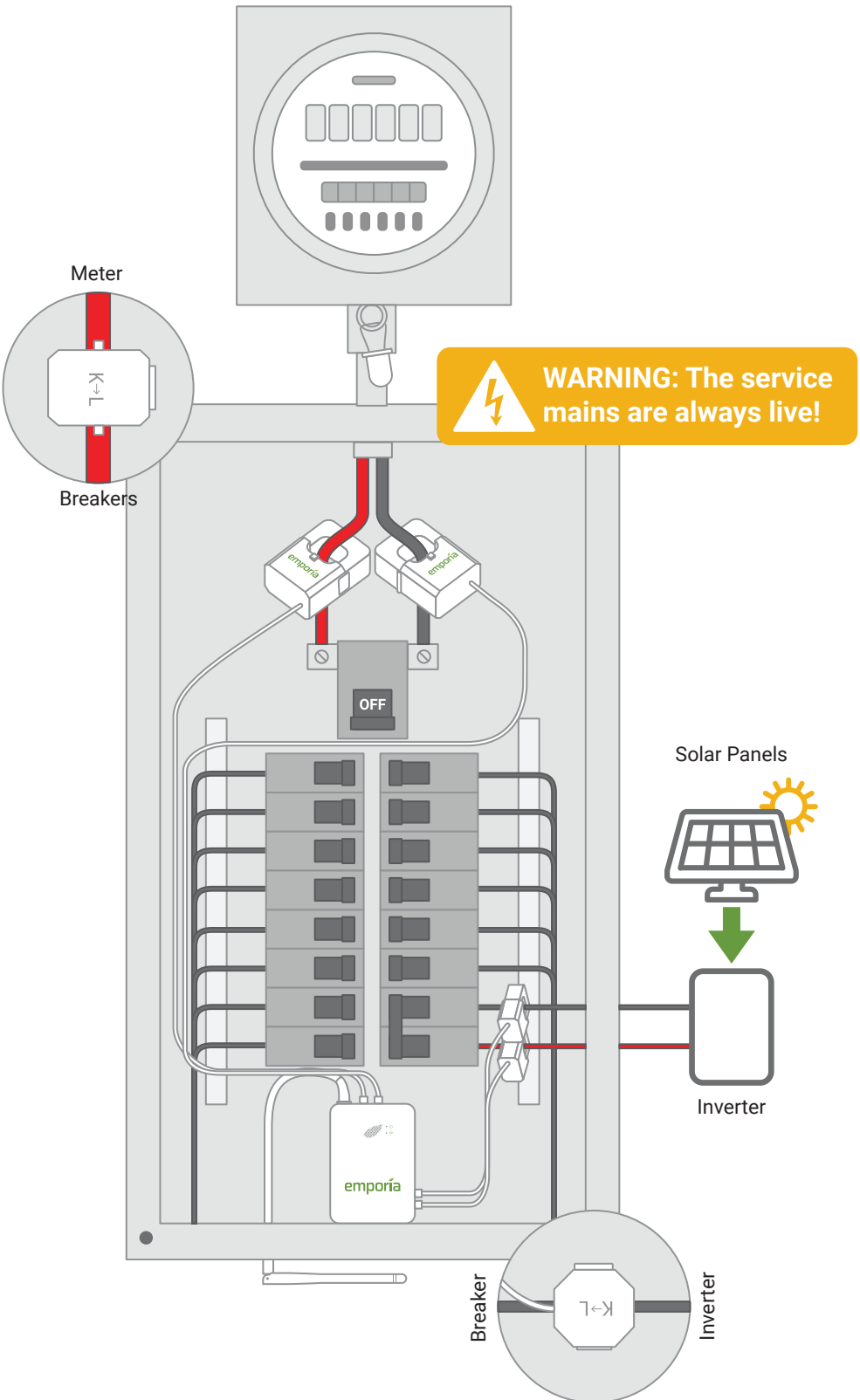
For the Vue to be able to calculate how much energy your system is getting from and sending out to the grid, you'll need to employ two 50A CTs on the incoming leads from your inverter. Installation depends on where these leads enter your system, which is illustrated in detail on the next two pages.

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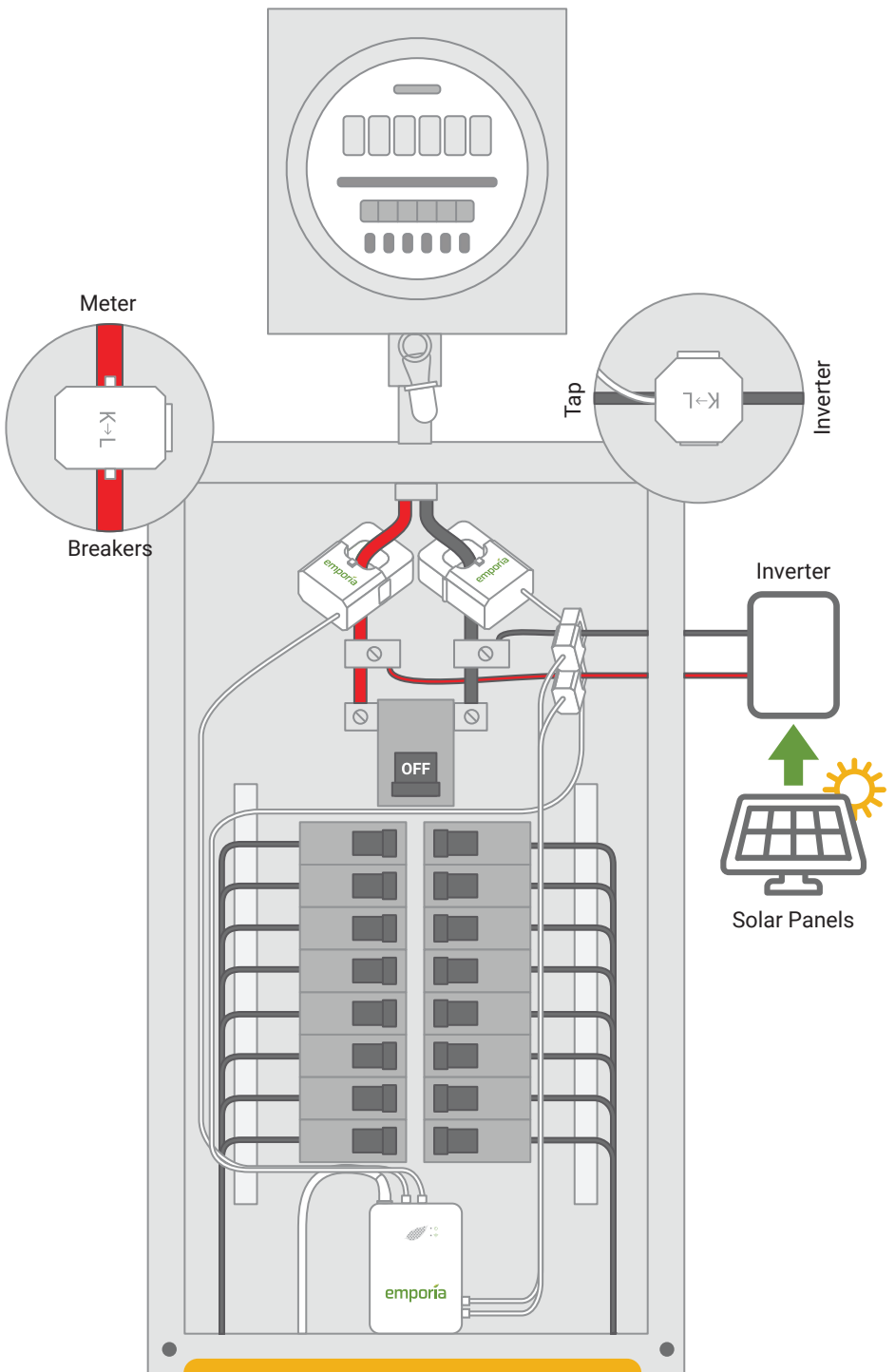
# Breaker-fed solar installation


For breaker-fed solar installs, the 200A CTs need only to be installed between the meter and the main breaker for net metering. To monitor how much energy is pulling from and sending back from the grid, install a 50A CT on each of the leads coming in from your inverter to the breaker. **Ensure the directionality of all CTs is correct.**



# Line-side tap solar installation

For line-side tap solar installs, the 200A CTs must be installed between the meter and incoming feeds from the inverter. To monitor how much energy is pulling from and sending back from the grid, install a 50A CT on each of the leads coming in from your inverter to the mains. **Ensure the directionality of all CTs is correct.**



 **WARNING: The service mains are always live!**

# Troubleshooting tips

If you're not seeing net metering or grid measurements, try the following:

- Ensure the 200A CTs are clamped on the mains between the meter and incoming leads from your solar inverter.
- Ensure all CTs are oriented as per the instructions. CTs are directional.
- Check that the appropriate wiring harness wires are attached to adjacent breakers on different phases as described in the Gen 2 Vue Installation Guide.
- When configuring the Vue with the App, make sure that you temporarily turn your solar off so it is not supplying power to your system. Try running the configuration at night.
- When configuring the Vue with the App, make sure that there is a discernable load on your system. Try turning on an oven, A/C, or dryer.

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# Technical details

## Energy Monitor

Power supply input: 100-240VAC 1Ø, 50/60Hz, 0.041A

Fuse: 260VAC/0.3A

(Fusible resistor: 10E, 1W, 5%, TH)

Power usage: < 3 Watts

Wi-Fi: 2.4 GHz 802.11b/g/n

Operating conditions: -40° -122° F (-40° - 50° C)

0-80% RH

## 200A Current Transformers

Max current: 200A

Cable length: 1 m

Inside diameter: 26 mm

## 50A Current Transformers

Max current: 50A

Cable length: 1 m

Inside diameter: 10 mm

The Vue energy monitor and current transformers are considered a system designed for field installation in a switch enclosure as per section 312.8(B) of the 2017 National Electrical Code (NEC) regarding Power Monitoring Equipment. The Vue is considered a non-invasive load monitor (NILM) and as a non-permanent fixture, it is acceptable to install in an electrical panel.



The Emporia Vue Smart Home Energy Monitor contains FCC ID: 2AS6P-EMCTV2 This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

**Caution:** Any changes or modifications not expressly approved by Emporia void the user's authority to operate the equipment.



I.T.E. Energy Monitor  
E506714

Designed in Colorado, USA. Manufactured in India.