emporía



Gen 2 Flexible Current Sensors for Gen 2 **VUE** Energy Monitors

Installation Guide



WARNING! The Emporia Vue requires installing sensors 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 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.

Safety information

- Personal protective gear should be worn when installing the Emporia Vue and current sensors.
- Do not use the Emporia Vue or current sensors 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 or current sensors.
- If you believe any of the Emporia Vue or current sensor 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° F (-40° C) or above 122° F (50° C).

Need help?

Before you get started

The Emporia Vue and current sensors are installed in your home's electrical panel. You'll turn off the main breaker, which will shut off all of the power in your home. However, the service mains will remain dangerously energized. The following items may help with safe installation. It's also helpful to perform the installation with a friend.



Phillips and flathead screwdrivers



Protective evewear



gloves



Alternative light source

Need help?

What's in the box

Your new Flexible Current Sensors are meant to replace the 200A current sensors that come standard with the Gen 2 Vue. These sensors are meant for use with split phase 120V/240V North American homes. If you believe that any of these items may have been damaged for any reason, do not attempt to use them and call support immediately.



Two 200A flexible current sensors with integrators and 3.5mm plugs



Need help?

Assembly: Connect the power supply output to the integrators

Your Flexible Current Sensors require power to operate. Locate the 12V output on the bottom of the included power supply that contains two barrel plugs. Insert a barrel plug into the jack on the side of each of the integrators as illustrated below.



Need help?

Steps 1 - 4: Vue Installation

This guide assumes that you have a Gen 2 Emporia Vue and you have completed Steps 1 through 4 of the Vue installation

guide – up to the point where you are instructed to plug in and connect the 200A sensors. At this point in the installation, you should have 1.) created an account and started the setup process in the app; 2.) turned off your main breaker and removed the cover on your electrical panel; 3.) found a place for your monitor; and 4.) mounted the Wifi antenna to the Vue. Your panel and Vue should be in a state similar to the image below.



Step 5: Plug in and connect the Flexible Current Sensors

Push the button on the side of the sensors to release one end of the Rogowski coil. Place each coil around one of the main service bus bars. Next, close the coils in the clasps to secure the sensors. **IMPORTANT! The (F) (C) (F) (C) (C)**



Step 6: Plug in the wire harness

Insert the power supply wiring harness into the bottom of the energy monitor until it clicks into place securely. The wire harness has 4 colored wires to power the Vue and monitor your system's voltage: White, Black, Blue, and Red.



Need help?

Step 7: Wire the Vue and power supply input to your system

The wire harness will be connected differently depending on whether or not you have enough empty breakers. Go to the step below based on your system. If you're unsure, **call Emporia Support and we'll help you through it.**

- Step 7(a) Two empty breakers
- Step 7(b) No empty breakers

Need help?

Step 7(a): Two empty breakers

The 120V input wires from the sensor power supply are interchangable. Secure the White and Blue wires from the wire harness and one of the input wires from the power supply to the neutral bus bar. Turn off two vertically adjacent (stacked) single pole breakers and secure the Red wire from the harness to the hot leads of one of the breakers. Connect the the Black harness wire, one of the input wires from the power supply, and an extra wire with a wire nut. Then secure the extra wire to the remaining empty breaker.



Step 7(b): No empty breaker

The 120V input wires from the sensor power supply are interchangable. Secure the White and Blue wires from the wire harness and one of the input wires from the power supply to the neutral bus bar. Turn off two vertically adjacent (stacked) single pole breakers and remove their wires. Connect one of the breaker wires to the Black harness wire, one of the input wires from the power supply, and an extra wire with a wire nut. Next, connect the second breaker wire to the Red harness wire and an extra wire with a wire nut. Then secure each of the extra wires to the two breaker poles.



Step 8: Return to Vue Guide

This concludes the steps in this guide. Please return to the Gen 2 Emporia Vue instructions and continue with Step 8: Plug in and connect the 50A sensors.



Technical Details

Flexible Current Sensors Coil window diameter: 36mm Coil cable diamter 8mm Max rated current: 200A Power supply output voltage: 12V DC, regulated Power supply input voltage: 120V AC Integrator input voltage range: 5-12V DC

The Vue energy monitor and current sensors 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 power supply for the Emporia Flexible Current Sensors is Listed by UL to meet the safety requirements for an AC/DC Class 2 Adapter