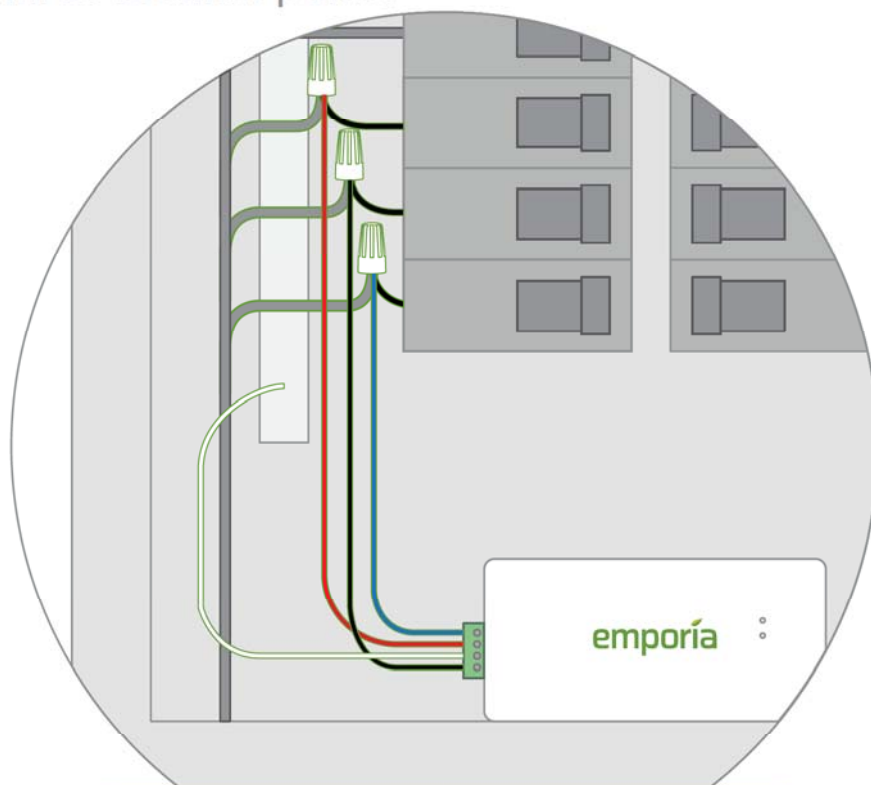


Step 7(d): No empty breaker and three Main CTs

Common in European 3-phase homes
Common in N. American commercial systems
Uncommon in N. American homes

Secure the White (N) wire from the wire harness to the neutral bus bar. Turn off three vertically adjacent (stacked) 15A single pole breakers and remove their wires. Connect one of the breaker wires to the **Black (L1)** harness wire and a splicing wire with a wire nut. Next, connect the second breaker wire to the **Red (L2)** harness wire and a splicing wire with a wire nut. Next, connect the third breaker wire to the **Blue (L3)** harness wire and a splicing wire with a wire nut. Then secure each of the splicing wires to the three breaker poles.



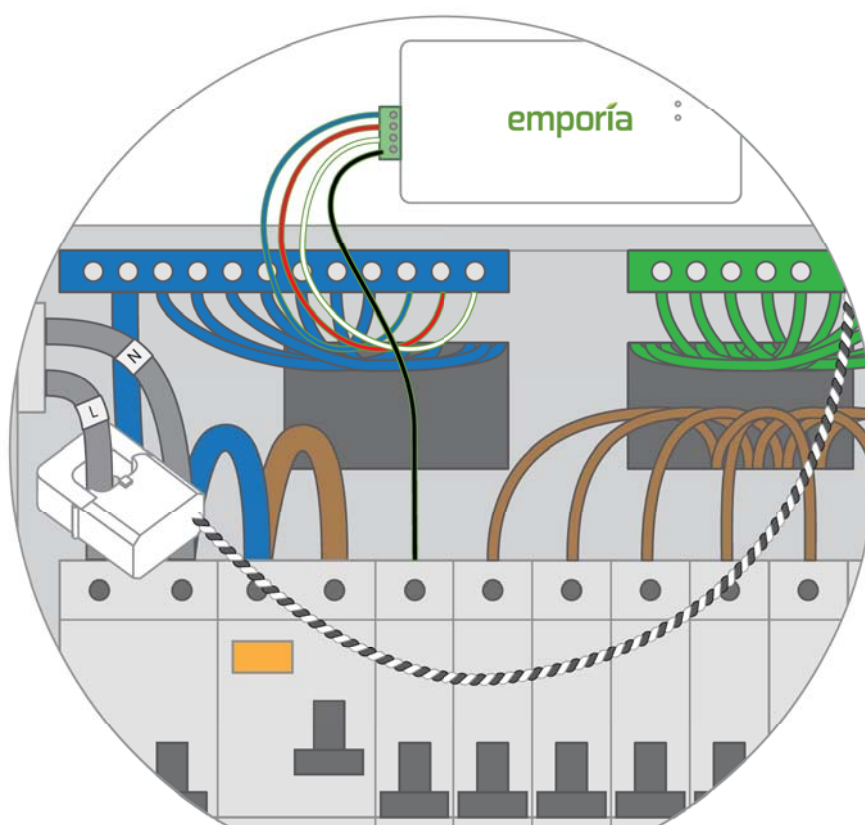
A larger amp breaker may be used if the gauge of the splicing wire matches the existing gauge wire from the breaker meeting the national and regional codes

Step 7(e): One empty breaker and one Main CT

Common in European 1-phase homes

Uncommon in N. American homes

Secure the **White (N)**, **Red (L2)**, and **Blue (L3)** wires from the wiring harness to the neutral block (you can use a wire nut and splicing wire if needed). Turn off an empty MCB and secure the **Black (L1)** wire from the harness to the hot lead from the MCB.



Any empty MCB size can be used in this scenario (not limited to 15A)

Need help?

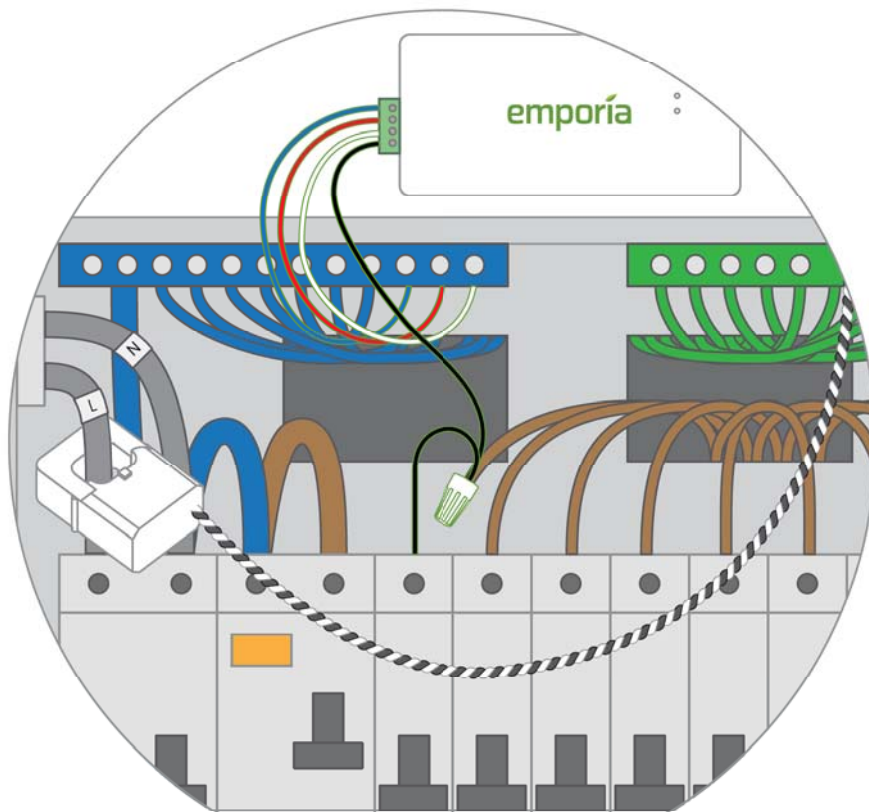
 emporiaeenergy.com/support
 support@emporiaeenergy.com
 1-844-EMPORIA (367-6742)

Step 7(f): No empty breaker and one Main CT

Common in European 1-phase homes

Uncommon in N. American homes

Secure the **White (N)**, **Red (L2)**, and **Blue (L3)** wires from the wire harness to the neutral block. Turn off a 15A MCB and disconnect its wire. Connect that wire to the **Black (L1)** wire from the harness and a splicing wire with the wire nut. Then secure the splicing Wire to the MCB.



A larger amp breaker may be used if the gauge of the splicing wire matches the existing gauge wire from the breaker meeting the national and regional codes

Need help?



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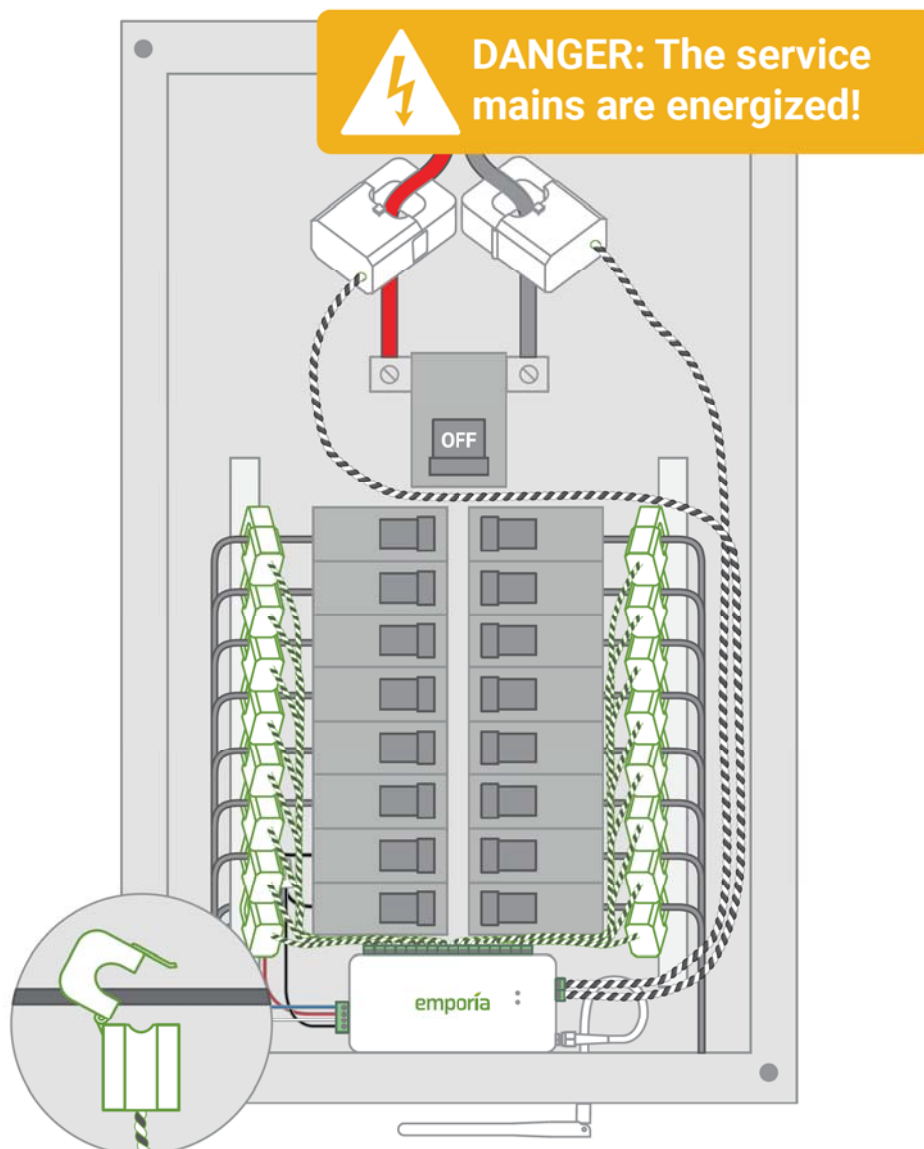
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Step 8: Plug in and connect the Branch current transformers

If the Vue has Branch CTs, open the clasps on the CTs and place each clamp around the non-neutral leg from the breaker that is to be monitored. Then shut the clasps to secure the CTs. Then, insert the screw terminal plugs into the ports on the top of the energy monitor. Note the port numbers. **To avoid clutter,** unscrew the 22 AWG wires from the screw terminals, cut them to size, and reattach them ensuring the black and white wires match the icons on the top of the Vue.

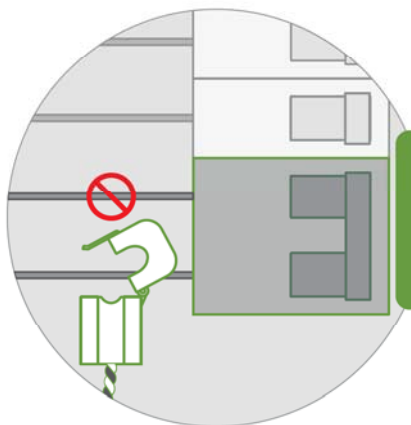


Step 8 (continued): A note about multi-pole breakers

If 2- or 3-pole breakers are to be monitored, we recommended that one CT be used for on each pole; however, to conserve the number of CTs, a single CT can be used. To use a single CT, clasp the clamp around either one of the non-neutral leads coming off the breaker (it doesn't matter which). When only one CT is used, input a circuit multiplier in the app to double or triple the reading by entering a "2" or "3". **Using a single CT to monitor a multi-pole breaker does not accurately monitor unbalanced loads.**



Most accurate - Attach one branch sensor on each leg of the breaker



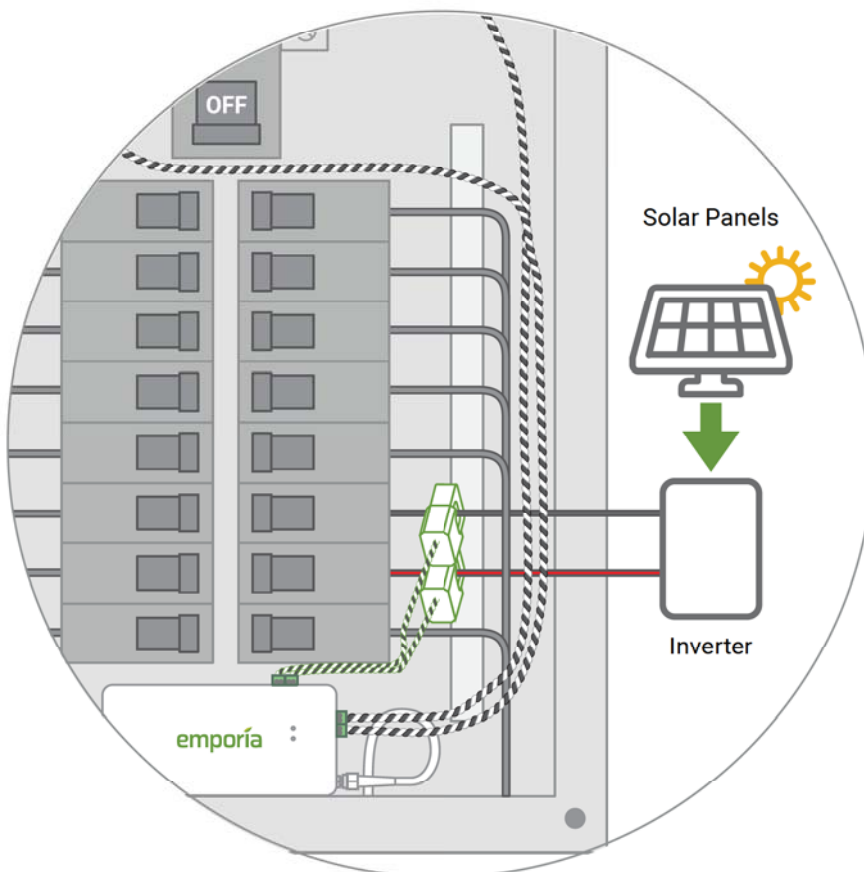
Less accurate - Attach one branch sensor on a single leg and use an app multiplier.

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Step 8 (continued): A note about solar monitoring

For the Vue to be able to calculate how much energy from the system is going to and from the grid, Branch CTs will need to be connected to the incoming leads from the inverter regardless of whether the solar is a **breaker-fed** or a **line-side tap** installation. **Specify the circuits monitored by these CTs as 'Solar/Generation' in the app.** If only one CT is used, input a circuit multiplier in the app to double or triple the reading by entering a "2" or "3".

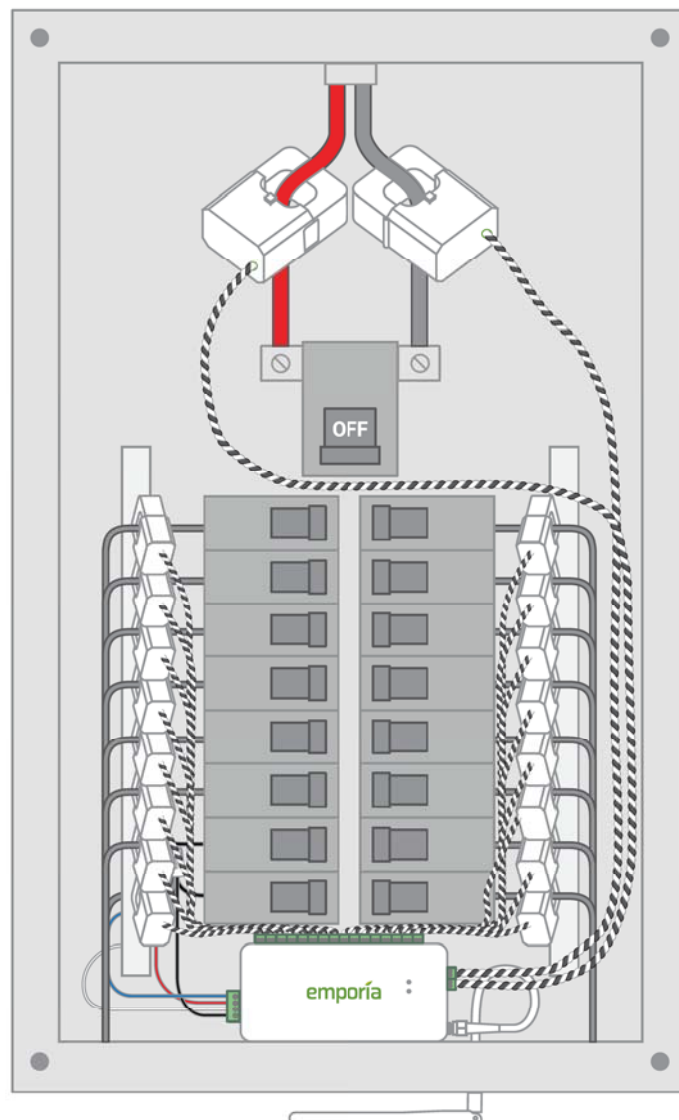


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Step 9: Take a photo of your system

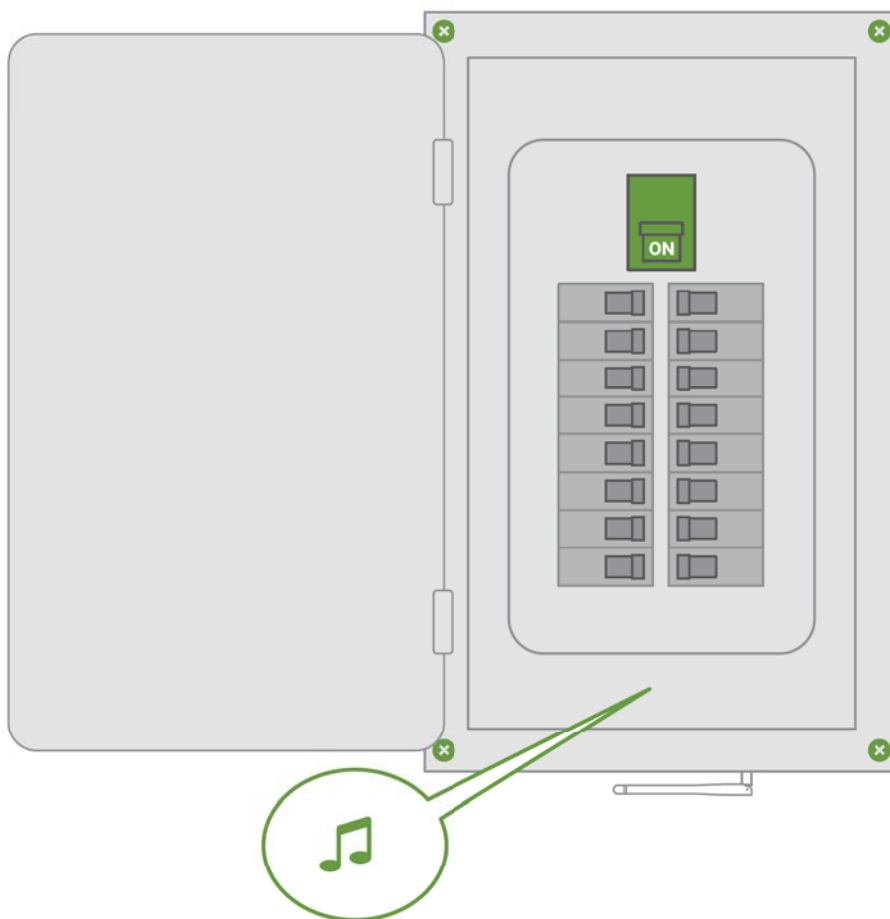
Before replacing your panel cover, take photos of the installation in case you need to contact support.



Step 10: Replace the cover and turn on all breakers

Secure the cover to the box with any screws you removed in Step 2. Next, return any breakers to the on position that you moved to the off position during installation to restore power to the circuits in the home.

You should hear a power up tone from the Vue to confirm it has power. Then, close the panel. Once the panel cover is replaced, the antenna connector and screw terminal ports on the Vue will not be accessible.



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Step 11: Complete setup

Return to the Emporia app to continue the setup process that you began in Step 1 by **scanning the QR code on the Vue or Getting Started Guide** to connect the Vue to the internet via Wi-Fi or wired LAN connection.



Need help?

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-  support@emporiaenergy.com
-  1-844-EMPORIA (367-6742)

Troubleshooting Tips

Here are some of our most frequent troubleshooting tips. For more help, check out the Emporia Help Center online at help.emporiaenergy.com.

The Emporia app is not finding the Vue after I've installed it.

- Ensure the Vue has power:
 - Check for a flashing Wi-Fi light.
 - Listen for a startup tone.
 - Check the wire harness is secure and wired properly.
 - Check that the main breaker is turned on.
 - Check that the breaker powering the Vue is turned on.
- Ensure your phone can connect to the Vue.
 - Check your phone's Bluetooth is on.
 - If you're using an Android, turn on Location Services for your phone to properly scan for Bluetooth devices.
 - If you're using an iPhone, make sure Bluetooth is allowed in the *Settings > Emporia Energy app > Bluetooth allowed*
- Ensure the Vue's Wi-Fi antenna has been installed properly.
 - Check the antenna is properly screwed into the energy monitor
 - Ensure the antenna is outside of the electric panel. It's ok if it is inside a wall, just ensure it's not inside the metal box.
- Ensure the Vue's wired LAN connection is installed properly
 - Check that the ethernet cable is securely connected to the Vue's LAN port
 - Check that the ethernet cable is securely connected to a router, switch, or modem
- Ensure the network does not have a firewall preventing new devices from accessing the internet

Troubleshooting Tips (continued)

- Try power cycling the breaker to which the Vue is connected.
- Try restarting the Emporia App.
- Try rebooting your phone.

The Emporia Energy app isn't getting real-time data from the Vue.

- Ensure all current transformers are securely fastened around their respective cables in the electric panel.
- Check the screw terminal plugs are securely plugged into the ports of the energy monitor.
- Check that the CT wires are securely connected to the screw terminals and that the screws are tight.

The Emporia app isn't showing solar net metering or grid measurements from the Vue.

- Ensure the Main CTs are clamped on the mains between the meter and incoming leads from the 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
- When configuring the Vue with the App, make sure that you temporarily turn the solar off so it is not supplying power to the system. Try running the configuration at night.
- When configuring the Vue with the App, make sure that there is a discernible load on the system. Try turning on an oven, A/C, or dryer.

Need help?

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- ✉ support@emporiaenergy.com
- ☎ 1-844-EMPORIA (367-6742)

Vue LED lights

The Vue has two LED lights on the front of the energy monitor, that can help troubleshoot the status of the internet connection and whether or not the monitor has power.

 Wi-Fi (and indication of power)	
Slowly Flashing Green	Not connected to router.
Quickly Flashing Green	Connected to router. Attempting Internet connection.
Solid green	Connected to Internet.
 Wired LAN	
Off	Not connected to router.
Flashing Blue	Connected to router. Attempting Internet connection.
Solid Blue	Connected to Internet.

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Technical Details

Energy Monitor (EMV3-A)

Supported system configurations:

- Single phase, 2-wire systems
- Single-split phase, 3-wire systems
- 3-phase, 4-wire Wye systems with earthed (TN or TT) neutral (no-Delta)

Fuse: 260VAC/0.3A (Fusible resistor: 10E, 1W, 5%, TH)

Maximum voltage sense range: 264VAC L-N per channel

Power usage: < 3 Watts

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

Ethernet: 10/100Base-T, IEEE 802.3

Operating conditions: -40° - 122° F (-40° - 50° C) | 0-80% RH
3,000 meters above sea level | Indoor | Dry location
Pollution Degree 2

Terminals:

- **Ethernet:** Cat5e, RJ45, 600V insulation required
- **WiFi:** SMA coaxial cable, 50Ω impedance, 600V insulation required
- **Voltage Terminals:**
 - ~100-240VAC line-to-neutral, 50/60Hz, 41mA, Overvoltage / Measurement CAT III
 - Field terminal torque value: 5Lb-In/0.56Nm
 - 16AWG, UL1015, 600V, 105C copper-only wiring
- **Main Current Transformer Terminals:**
 - 3.3V, 1mA, Measurement CAT IV
 - Field terminal torque value: 5Lb-In/0.56Nm
 - 22AWG, UL1015, 600V, 105C copper-only wiring
- **Branch Current Transformer Terminals:**
 - 3.3V, 1mA, Measurement CAT III
 - Field terminal torque value: 3Lb-In/0.2Nm
 - 22AWG, UL1015, 600V, 105C copper-only wiring

Main Current Transformers (EMV3CT2-A)

- Max Primary Current: 200A
- Max Voltage: 250V (Primary) / 333mV (Secondary)
- Burden Resistor: 5ohm, 1%, 1/4W
- Cable length: 1m
- Inside diameter: 22 mm
- Accuracy: ±2%

Branch Current Transformers (EMV3CT5-A)

- Max Primary Current: 50A
- Max Voltage: 250V (Primary) / 333mV (Secondary)
- Burden Resistor: 20ohm, 1%, 1/4W
- Cable length: 1m
- Inside diameter: 10 mm
- Accuracy: ±2%



Measurement categories are defined by the CE and UL safety standard IEC 61010-1 and are used to indicate the ability of an instrument (like the Vue Energy Monitor) to withstand voltage spikes without posing a shock hazard to the operator. An instrument should only be used at or below its rated measurement category and voltage. For example, the Vue Energy Monitor is CAT III rated and can be used to monitor **CAT I**, **CAT II**, and **CAT III** circuits.

CAT III: This category is for measurements performed on equipment permanently installed in the building. Examples are measurements on motor control centers, circuit-breaker panels, junction boxes, switches, lighting fixtures, and wiring, including cables, bus-bars, and equipment for industrial use and some other equipment, for example, stationary motors with permanent connections to the electrical distribution system.

There are situations where the Vue Energy Monitor needs to monitor the main service entrance, which is classified as **CAT IV**. In this situation, the Vue voltage inputs (green screw terminal block) must be connected in a breaker panel or panel board, downstream of a the main disconnect, breaker, or fuses. The line voltages at this location will be essentially identical to the voltages measured at the main disconnect, so the Vue's measurements will be accurate.



IC: XXXXX-XXXXXXX

This device complies with Industry Canada licence-exempt RSS-247 standard. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Need help?

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-  support@emporiaenergy.com
-  1-844-EMPORIA (367-6742)

Information de sécurité



Ceci est le symbole d'alerte de sécurité. Il est utilisé pour vous avertir des risques potentiels de blessures corporelles. Respectez tous les messages de sécurité qui accompagnent ce symbole pour éviter d'éventuelles blessures ou la mort.

AVERTISSEMENT

AVERTISSEMENT indique une situation dangereuse qui, si elle n'est pas évitée, peut entraîner la mort ou des blessures graves.

AVERTISSEMENT

L'Emporia Vue nécessite l'installation de transformateurs à l'intérieur du panneau électrique de votre maison et une tension dangereuse pouvant entraîner des blessures ou la mort. Emporia vous prions de bien vouloir que l'installation soit effectuée par une personne qualifiée, telle qu'un électricien agréé ou un autre professionnel qualifié, conformément au code électrique régional du lieu d'installation.

Une installation ou une utilisation incorrecte de l'équipement peut être dangereuse, voire mortelle. Emporia ne pourra en aucun cas être tenu responsable envers vous ou un tiers pour tout dommage, direct ou indirect, pour une blessure personnelle résultant de votre non-respect des informations et instructions de sécurité contenues dans ce guide d'installation.

Information de sécurité

AVERTISSEMENT

- Coupez l'alimentation du panneau électrique avant l'inspection. Portez des lunettes et des gants de protection avant de tenter d'inspecter le système Vue. Assurez-vous qu'aucun câblage pour la mesure de tension, la mesure de courant, l'alimentation ou les données n'est effiloché ou n'a de conducteurs exposés. Assurez-vous qu'il n'y a pas de fissures, de cassures ou d'autres défauts dans le boîtier du Vue ou des CT.
- Si vous pensez que l'un des composants de l'Emporia Vue peut avoir été endommagé, n'essayez pas de l'utiliser. Contactez immédiatement l'assistance à support@emporiaenergy.com.
- N'utilisez pas l'Emporia Vue d'une manière autre que celle spécifiée dans ce guide d'installation, sinon la protection fournie par l'équipement pourrait être altérée.
- N'essayez pas d'ouvrir, de démonter ou de réparer l'un des composants de l'Emporia Vue.
- N'installez pas l'Emporia Vue dans des environnements contenant des gaz ou des vapeurs explosifs ; ni dans des environnements humides ou mouillés ; ni en plein soleil ; ni lorsque les températures sont constamment inférieures à -40 °F (-40 °C) ou supérieures à 122 °F (50 °C).
- Assurez-vous que l'Emporia Vue n'est pas sous tension pendant toute manipulation, y compris l'installation et le démontage.
- N'effectuez aucun entretien, service ou nettoyage du Vue après l'installation. Contactez le service client pour obtenir de l'aide.
- L'Emporia Vue ne doit être utilisé qu'avec des transformateurs de courant de surveillance de l'énergie répertoriés. Isolation de base, utilisez les TC uniquement sur un conducteur isolé, à l'abri des contacts avec des pièces sous tension.
- Pour réduire le risque de choc électrique, toujours ouvrir ou déconnecter les circuits du système de distribution d'alimentation (ou de service) d'un bâtiment avant l'installation ou l'entretien transformateurs de courant.
- L'Emporia Vue doit être câblé à l'aide de fils de cuivre 16AWG, 600V, UL1015, 105° C (ou plus)
- Il est recommandé de câbler l'Emporia Vue au disjoncteur le plus proche de l'appareil.

Information de sécurité

AVERTISSEMENT

- Ne placez pas l'Emporia Vue de manière à ce qu'il soit difficile d'actionner des dispositifs de déconnexion ou des disjoncteurs.
- N'utilisez pas d'accessoires tiers ou Current Transformateurs (TC) avec l'Emporia Vue. Le Vue et les CT sont personnalisés et intégrés. Les accessoires tiers ou les TC peuvent compromettre l'exactitude des données et la sécurité de l'équipement.
- Les transformateurs de courant ne peuvent pas être installés dans des équipements où ils dépassent 75 % de l'espace de câblage de toute section transversale de l'équipement.
- Restreindre l'installation des transformateurs de courant dans une zone où cela obstruerait les ouvertures de ventilation.
- Restreindre l'installation des transformateurs de courant dans une zone d'évacuation d'arc du disjoncteur. N'installez pas le moniteur d'énergie Emporia Vue dans une zone où les gaz d'échappement de la ventilation de l'arc du disjoncteur pourraient être redirigés à la suite de l'installation d'un équipement de sous-mesure.
- L'Emporia Vue n'est pas adapté aux méthodes de câblage de classe 2 et n'est pas destiné à être connecté à un équipement de classe 2.
- Sécurisez les transformateurs de courant et acheminez les conducteurs de manière à ce qu'ils n'entrent pas directement en contact avec les bornes sous tension ou les bus.
- L'Emporia Vue ne doit pas être monté à moins de 50,8 mm (2 pouces) de toute pièce sous tension, y compris les conducteurs primaires, les bornes primaires et les cosses primaires ; mais à l'exclusion des câbles isolés. Il est acceptable que le Vue soit monté sur le boîtier du panneau mis à la terre et près des barres omnibus neutres/terre. Le Vue utilise un câblage de classe I permettant à ses fils de coexister en toute sécurité avec tous les autres fils du panneau.
- Si le moniteur d'énergie Emporia Vue est fixé au boîtier, il ne doit pas entrer en contact avec l'isolation intérieure du panneau, telle que le matériau qui sépare les barres omnibus GND et LIVE.
- Les dispositions de montage du moniteur d'énergie Emporia Vue ne doivent être fixées à aucune pièce sous tension.
- Les connexions de détection de tension et d'alimentation électrique à la tension primaire doivent être protégées contre les surintensités par le biais d'une connexion à un disjoncteur/MCB.



FCC ID:
XXXX-XXXX
Model: EMV3-A

Federal Communication Commission Interference Statement

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. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

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.

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

Designed by Emporia Corp in Littleton, Colorado, USA.

Manufactured by VVDN Technologies Pvt. Ltd.

Plot No: CP-07, Sector-8, IMT Manesar, Gurugram, Haryana - 122050.

Need help?



emporiaenergy.com/support



support@emporiaenergy.com



1-844-EMPORIA (367-6742)

FCC Radiation Exposure Statement

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.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limit set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Cet é quipement est conforme aux CNR-102 d'Industrie Canada. Cet é quipement doit ê treinstall é et utilis é avec une distance minimale de 20 centim è tres entre le radiateur et votrecorps. Cet é metteur ne doit pas ê tre co-localis é es ou op é rant en conjonction avec autreantenne ou é metteur. Les antennes utilis é es pour cet é metteur doivent ê tre install é s etfournir une distance de s é paration d'au moins 20 centim è tre de toute personne et doit pas ê tre co-situ é e ni fonctionner en conjonction avec une autre antenne ou é metteur.