

Quick Installation Guide

This document is made to be read in conjunction with the *FranklinWH System Installation Guide*. Can be downloaded from www.franklinwh.com.

Before beginning any installation, please ensure that you have complete the online training and have received your credentials. Once his training is completed you will be provided with a login for the commissioning software. This will ensure that the unit is installed as per the requirements of our warranty and protect you and your customer.

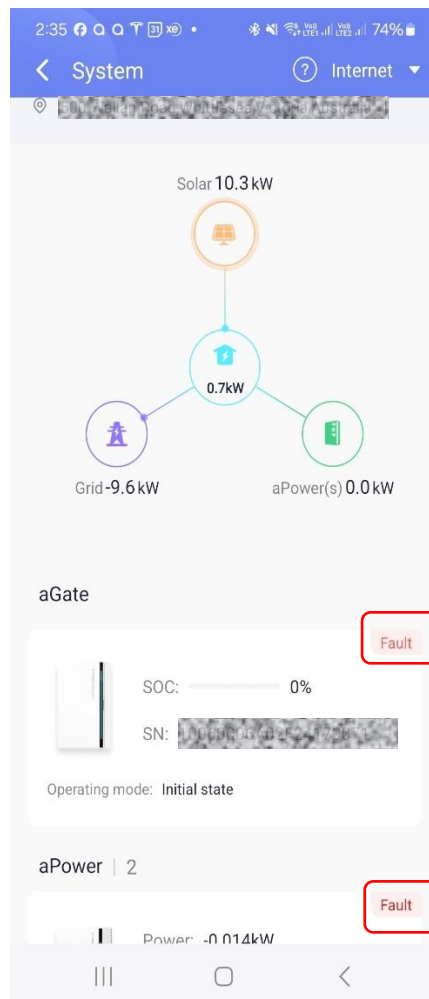
- Mount aPower and wire to aGate as per installation instructions (Can be found on the FranklinWH website).
- Mount aGate and connect to power in switchboard.
- Wire Solar Inverter to applicable terminals (Single Phase to 15kW).
- Wire aPower to applicable terminal (Up to 4 Direct into terminals).
- if you are doing whole of house or specific back up circuits connect Backup CB to applicable terminals.
- Bridge incoming neutral to neutral link (as per instructions Page 66).
- Clamp supplied CT on incoming mains with arrow facing towards a gate – **even if you are using a three-phase meter.**
- Plug data cable to the aPower into **CAN out** on the aGate EMS and into **CAN in** on the aPower. If it is more than 30 m from the aPower battery to the aGate, run the extra cable for the 20 Vs (Page 62 of installation instructions).
- **NOTE: Make sure you test this data cable as it is critical to the operation of the unit. If this cable does not work the system will fail its initial software loading.**
- Turn on aPower(s) (right hand side push button).
- Turn on red switch on aGate EMS.
- Activate commissioning software and connect to access point following instructions.
- **TIP:** If you have an iPhone, turn off mobile data before commencing commissioning.
- Serial number is the left hand QR code on the bottom of the EMS module or on the cover of the aGate with AxxF in the middle.
- Password for Wi-Fi is everything including and after the A of the serial number.
- **TIP:** If you look at the A and the following 2 numbers and remember these the rest of the password is printed on your screen as the access point number you are trying to connect to.
- Follow the steps of the software to connect to the Wi-Fi and then follow on with the commissioning of the 4G. The unit comes supplied with the SIM card installed.
- When you have solar connected to the aGate directly make sure to activate this in the software including putting in the value of the solar inverter(s).

Three phase

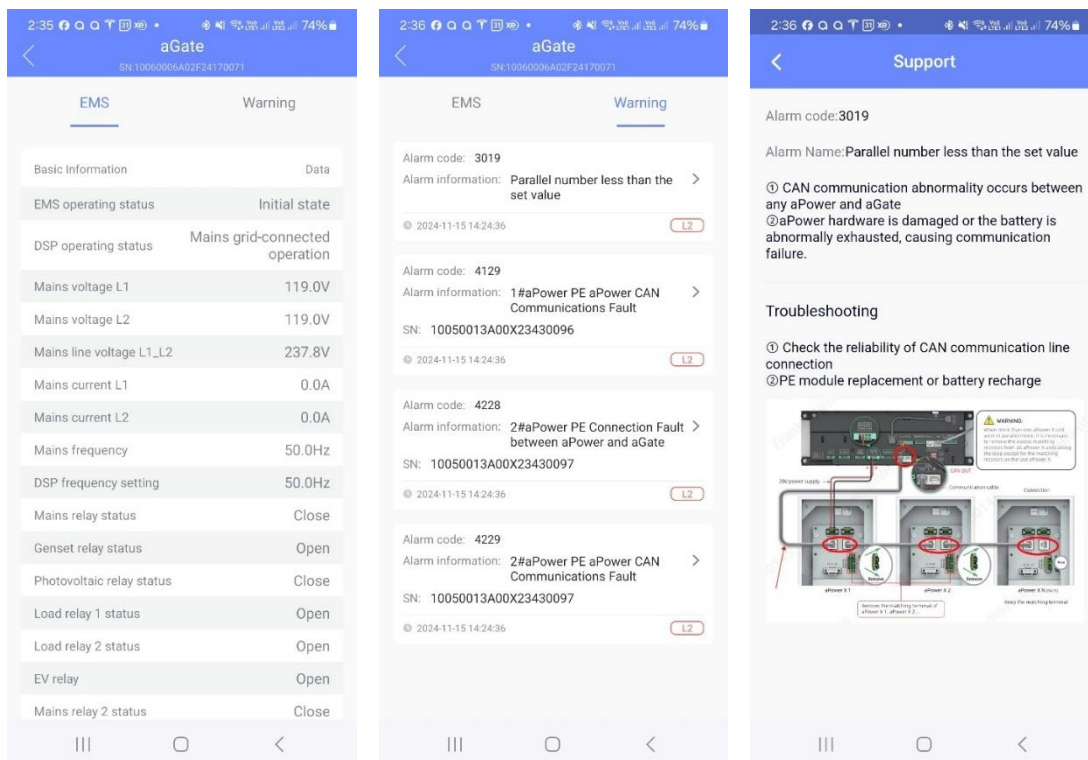
- If the supply to the property is three phase, connect the output of the Grid Power Metre to terminals A4 and B4 of the RS485 input on the top of the EMS module.
- If the solar is also three phase, connect the output of the Solar Production Meter to terminal 6B and 6A of RS485 port on the Bottom of the EMS module.
- Activate three-phase solar and grid in the software.
- **TIP:** When you connect the three-phase CTs monitoring the grid, make sure that the CT on Input 1 is on the phase supplying the aGate.

Fault Finding

In the aGate App software, if there is a fault, the system will tell you.

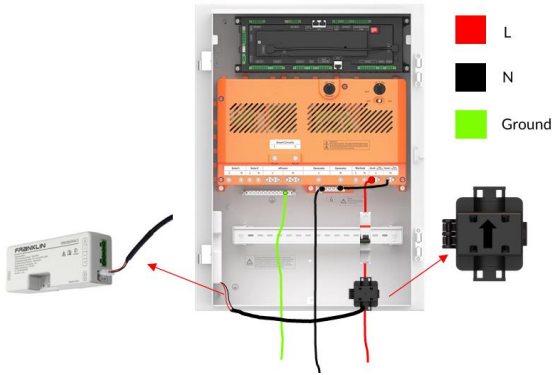


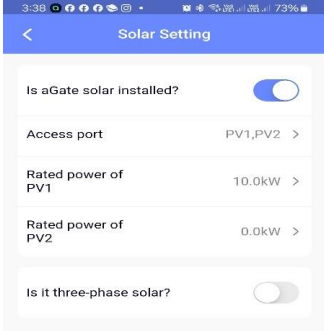
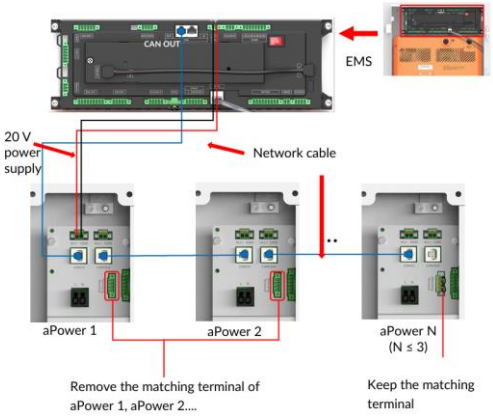
Tap the symbol and you will get the information screen, then click on the warning and you will see the information on what is driving the warning. Follow the instructions to correct and then restart the system in the **Tools** section of the App.



There are several issues that are re-occurring issues for installers.

To try and improve the install experience please see below some hints that may help.

| Problem | Solution |
|---|--|
| Can't connect my iPhone to the aGate | Turn Mobile Data off on your iPhone and try again. Once you have paired the aPower(s) with the aGate and are prompted to connect via the network you can then turn it back on. |
| Grid Value does not appear in the App, or the leg is Greyed Out (Should be Purple). | <ol style="list-style-type: none"> 1. Check that you have not mixed up the cables for Grid and Back up 2. Is the Grid CT installed? There is a CT supplied in every aGate. The load CT is not built in. 3. Even if there is no back up connection to the aGate or it is a three-phase installation the CT is still required. 4. The arrow on the CT should face the aGate terminal. <p>Page 72 of the installation manual</p>  |

| Problem | Solution |
|--|--|
| <p>Solar Value is not appearing in the App after Commissioning</p> | <ol style="list-style-type: none"> 1 Is there power on the Solar 1 & 2 terminals? 2 Is “aGate solar installed” turned on and solar setup in the app? Make sure even if the Solar input is activated that you have entered a value of the inverter power.  <ol style="list-style-type: none"> 3 Check the wiring if it is a three-phase meter. Three-phase Solar Meter data should be connected to input 6B and 6A on the RS485 terminals of the aGate EMS. |
| <p>No aPower energy / Fault on App</p> | <ol style="list-style-type: none"> 1. Is the battery turned on? Turn aPower on. 2. Did you test your data cable to the aPower from the aGate? 3. Check cable, can you run a cable through free air to test? |
| <p>Low Voltage (72VAC) on Grid Terminals in an outage</p> | <ul style="list-style-type: none"> • Is the bridge installed from the Grid Neutral to the Backup Neutral as per installation instructions. <p>Page 66 of the installation manual</p> <p>WARNING:</p> <p>To comply with the requirements of AS/NZS 3000 Clause 7.3.8.1.1 a – The incoming Neutral SHALL NOT be switched. The neutral cables of the grid side and back-up side must both be connected together to the N-Bar, wiring reference figure below.</p> |
| <p>Software Upgrade Fail</p> | <ul style="list-style-type: none"> • Check that the aPower is turned on (push button on the side of the unit) If not, turn on and restart the firmware up grade • Is the CAN Bus cable run correctly? Test • IS the battery ~30m away from the aGate? Did you install the 20V line? <p>Page 62 of the Installation manual</p> <ul style="list-style-type: none"> • When the distance between the aGate and the first aPower is longer than 30m, both a network cable and a 20V power supply cable must be used.  |

| Problem | Solution |
|---|---|
| Solar System shuts down on grid but works off grid | <ul style="list-style-type: none"> • Have you registered the Solar System Inverter with your DNSP? If not, the Solar inverter may/will not operate. • If you have enough storage, you can turn the grid off and move the CT to the backup (flip over if doing whole home back up) and the solar will then run and can charge the batteries. • Remember to relocate the CT when the system is returned to normal operation. |
| House load is following the Solar Generation – 3 phase site – 1 phase solar | <ul style="list-style-type: none"> • Check that you have installed the CT on terminal 1 of the external energy meter on the phase that is running the aGate. If the CT is installed on a different phase the system will see the generation as load. |
| No WIFI as system has not been commissioned | <ul style="list-style-type: none"> • Turn on all the power. If grid on and battery on there is power on all outputs. You can check if you're in "Backup" mode or "On Grid" by seeing if there is a difference between the voltage on each terminal. |
| No WIFI available | <ul style="list-style-type: none"> • On the network page of the commissioning process click on the 4G / Configure / Next (a sim card is in the machine on delivery) / Finish with Complete once connected. |

If you have any questions, please contact our help line on 1800 161 300 or email info-au@franklinwh.com.