

SI Gateway

Quick Start Guide

Connect your solar inverter to the Solaire Intelligence app — and to Home Assistant, if you use it.



What's in the box



- SI Gateway unit
- WiFi antenna
- 12 V power supply
- Ethernet cable (RJ45)
- This guide

About 30 minutes, start to finish. Most of that is mounting the box and waiting for the app to provision. The wiring itself is one cable.

Safety first

A qualified electrician or solar-trained installer is the preferred person to do this — and if you already have one looking after your system, ask them. That said, this guide will show you that the installation itself is straightforward: you mount a small box, plug in one network cable, and plug in a power supply.

Be honest with yourself

Only you know how comfortable you are working around electrical equipment. Opening an inverter panel is not difficult, but it does mean working inside equipment connected to mains, batteries and solar panels. If that is not something you would do confidently, stop here and call your installer — there is no prize for doing it yourself.

Power the inverter down before any work begins

This is the one step that is not optional. Shut the inverter down and isolate it — AC, battery and PV — following the shutdown procedure in your inverter manual, before you remove any panel.

Solar panels produce voltage whenever there is daylight on them, and a battery cannot be switched off. Follow your inverter's documented isolation sequence rather than assuming the on/off switch has made it safe.

If at any point something does not look like the pictures in this guide, stop and call us. We would far rather talk you through it than have you guess.

Step 1 — Tools you'll need

Tool	What for
Allen key	Opening the inverter panel
Small flat screwdriver	The power supply connector on the gateway
Drill	Two holes for mounting
Wall plugs	To suit your wall
5 mm screws × 2	Through the gateway's mounting tabs

Step 2 — Mount the gateway and connect it to the inverter

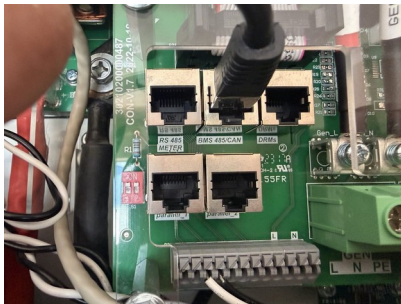
Choose a spot and mount it

Pick a convenient spot near the inverter but away from other electrical equipment — the further from switchgear, inverters and cabling, the better the WiFi signal. Drill, plug, and fix the unit with the two 5 mm screws through its mounting tabs.

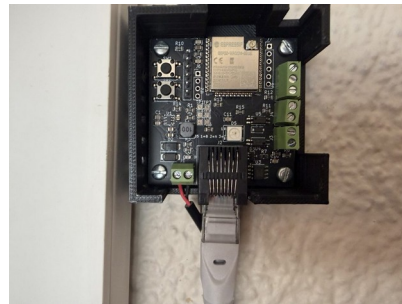


Connect the cable

1. Open the inverter panel with the Allen key.
2. Plug one end of the supplied Ethernet cable into the **RS485 port** on the inverter.
3. Plug the other end into the **RJ45 port** on the SI Gateway node.



RS485 port on the inverter



RJ45 port on the gateway

Note — shared battery and RS485 port

Some inverters share the battery communication and RS485 on the same port. If yours does, you will need an RS485 splitter — we can supply one. Give us a call before you start and we will confirm which your inverter needs.

Step 3 — Power up

The power supply is already connected to the gateway — 12 V positive and negative into the input terminals. The other end is an ordinary plug.

1. Close up the inverter panel and restore power to the inverter.
2. Plug the power supply into a 220 V outlet.
3. Watch the status light on the gateway.

What the light does on first power-up

The LED lights up Amber, showing it is ready to be paired.



Step 4 — Get the app

Download **Solaire Intelligence** from the Apple App Store, or open it in any browser at

portal.solaire-intelligence.co.za

The browser version does everything the app does — use whichever suits you.

Step 5 — Create an account

Sign up and follow the prompts. This is the account your devices will belong to, so use an email address you will keep.

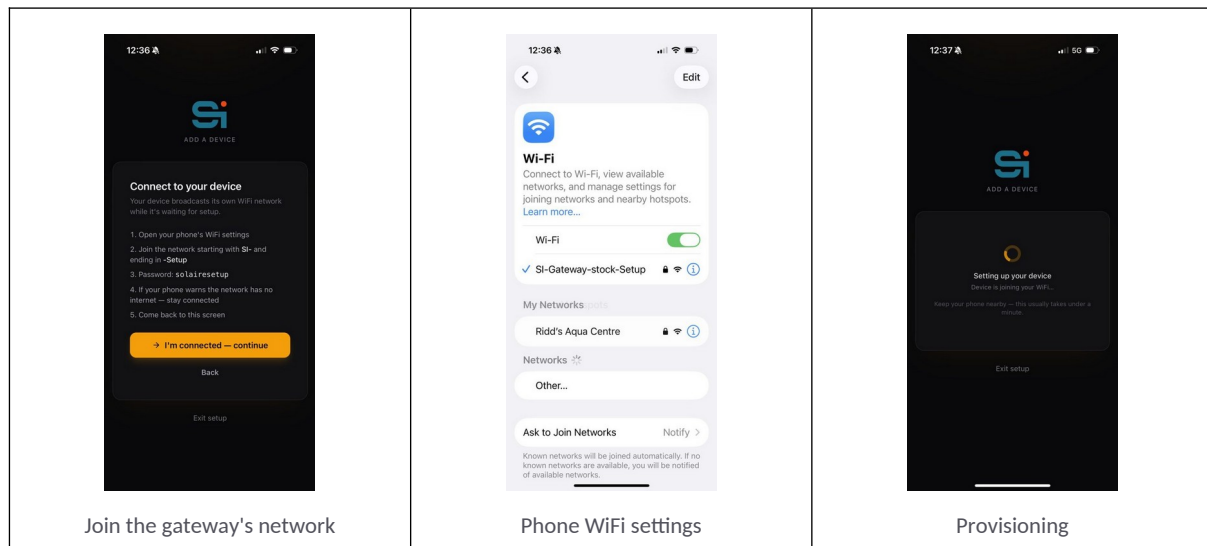
Step 6 — Add your device

Tap the **+** button at the top of the app.

Step 7 — Connect and provision

The app walks you through this. In short:

1. The app asks you to join the WiFi network the gateway broadcasts. Go to your phone's WiFi settings and connect to the network beginning with SI-Gateway.
2. Password: **solairesetup** — one word, all lowercase.
3. Go back to the app and confirm you are connected.
4. The app asks you to select your home WiFi network. It must be 2.4 GHz — the gateway cannot join a 5 GHz network.
5. Enter your WiFi password and tap OK.
6. The system provisions in the background. This takes a couple of minutes.
7. When it is ready, tap **Go to dashboard** — and you are up and running.



Tip — your phone may not let go

Sometimes a phone will not drop the gateway's WiFi network by itself. If the app seems to stall, go to your WiFi settings, disconnect from the SI-Gateway network and reconnect to your home WiFi, then return to the app.



That's it

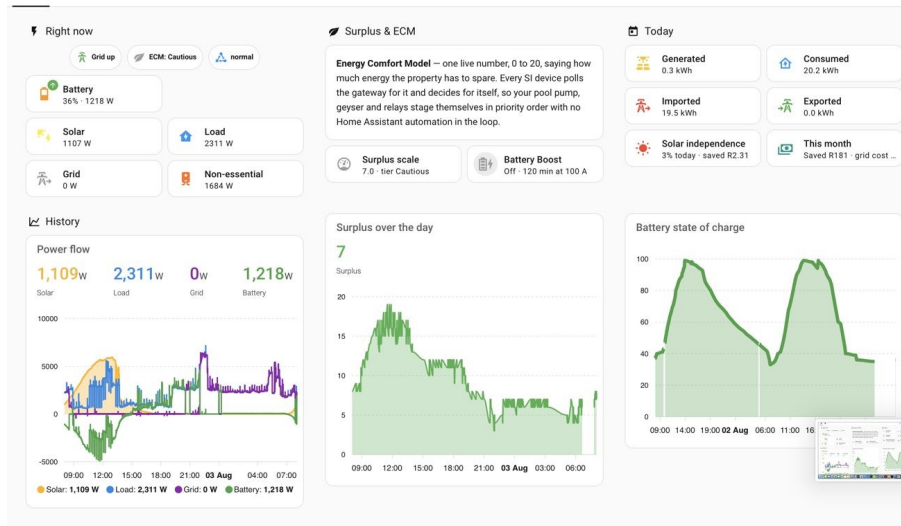
Your inverter now appears in the app with live solar, battery, load and grid figures. The gateway keeps running on its own — you can close the app and come back any time.

Home Assistant — optional

This section is only for people who already run Home Assistant and prefer it to the SI portal app. If that is not you, you are finished — skip to the back page.

It finds itself

Once the gateway is on your home WiFi, it auto-discovers in Home Assistant under **Settings** → **Devices & Services** → **ESPHome**. Add it, give it a name, and that is the integration complete. No add-on, no API key, no cloud account.



Pre-built dashboards

Ready-made dashboards are free to download from our GitHub repository:

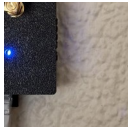
github.com/solaire-intelligence/solaire-home-assistant

Download the dashboard for your product, create a new dashboard in Home Assistant, open the raw configuration editor and paste it in. It is instantly ready — nothing to rename or edit.

All the automations are already on the device

There is nothing to set up in Home Assistant. The timers, the surplus staging, the protections — all of it is configured on the gateway itself and runs there. Home Assistant is a window and a remote control, not a dependency: unplug it and your system carries on exactly as before.

Status light reference

Light	Means	What to do
	Amber Waiting for setup, or cannot reach your WiFi	If you have not paired it yet, this is normal. If it was working before, it has lost your WiFi — check your router and that the antenna is still fitted.
	Blue On WiFi, waiting for the inverter	Normal for a few seconds. If it stays blue, check the Ethernet cable is pushed fully home at both ends.
	Green Everything working	Nothing. This is what you want to see.
RED	Red Lost contact with the inverter	Check the Ethernet cable at both ends. If the inverter has been switched off, this is expected.
OFF	No light at all No power	Check the power supply is plugged in at both ends and the outlet is switched on.

If something isn't right

I can't see the SI-Gateway network on my phone

- Check the antenna is fitted.
- Unplug the gateway, wait ten seconds, plug it back in and give it 30 seconds.

The list of WiFi networks is empty

- Turn Auto-Join off for the SI-Gateway network in your phone's WiFi settings, then start again.
- Check the antenna is fitted — by far the most common cause.

My network isn't in the list

- The gateway works on 2.4 GHz only. If your router splits 2.4 and 5 GHz into separate names, choose the 2.4 GHz one.
- Hidden networks won't appear — you can type the name manually.

I want to start again

Hold the BOOT button on the gateway for ten seconds. The light flashes to confirm and the unit returns to factory state, ready to pair again from Step 6.

Support

Have your inverter make and model handy, and tell us what colour the status light is showing — that alone usually tells us where you are.

Email	sales@solairesa.co.za
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Phone / WhatsApp	073 894 8248
Web	solaire-intelligence.co.za

Solaire Intelligence accepts no liability for injury, loss or damage arising from work carried out inside an inverter, battery enclosure or distribution board. If you are in any doubt, appoint a registered electrician or your accredited solar installer.