DOC-02 / QUICK INSTALL GUIDE

Install in 8 steps.

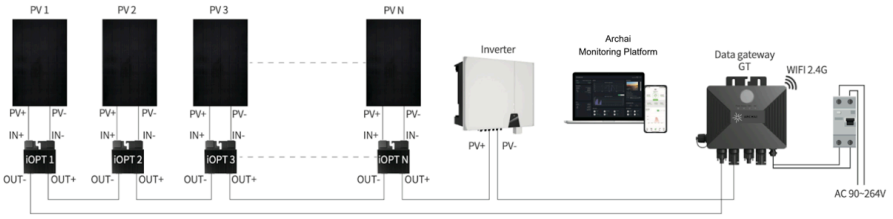
iOPT 800W optimisers + GT data gateway. About 10 minutes per panel, plus a 10-minute self-test.

Before you start

- Qualified installers only. Work to BS 7671 and the inverter manual.
- Inverter DC switch **OFF** and array disconnected.
- **Fitting:** connect IN first, then OUT.
- **Removing:** disconnect OUT first, then IN.

You need

- 1 × iOPT 800W per panel
- 1 × GT gateway per string (up to 30 optimisers)
- Layout sheet + marker pen
- Multimeter
- SolarSync app (iOS / Android)

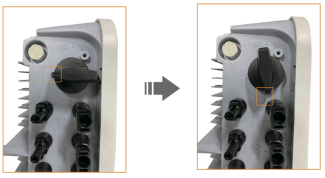


System Wiring Diagram

HOW IT CONNECTS · PANELS → OPTIMISERS → GT → INVERTER · GT TO SOLARSYNC VIA WI-FI

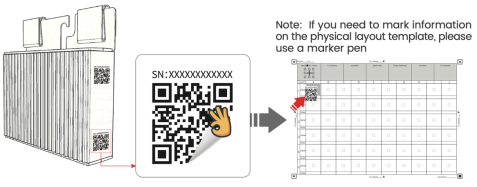
01 Isolate

Turn the inverter DC switch OFF. Disconnect the array from the inverter.



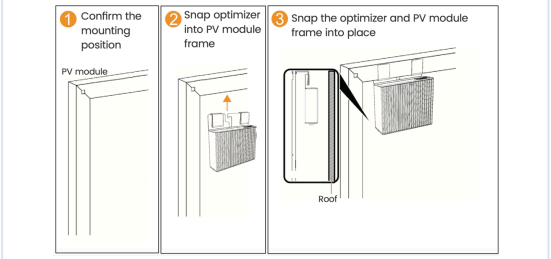
02 Label

Peel the serial-number sticker off each optimiser. Stick it on the layout sheet in that panel's position.



03 Clip on

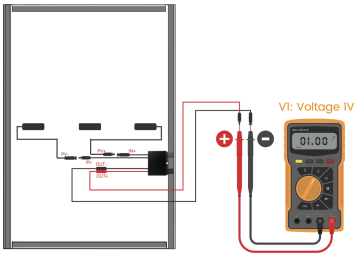
Snap the optimiser onto the module frame, behind the panel. Make sure both clips lock.



04 Connect the inputs

Panel + and − to optimiser IN+ and IN−. Push each Stäubli MC4 home until it clicks, then tug-test. Never mate with another brand. Measure OUT+ to OUT−.

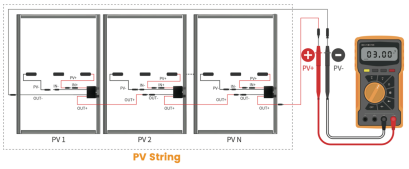
✓ CHECK: ABOUT 1 V (0.9-1.1 V)



05 Chain the outputs

OUT+ of each optimiser to OUT− of the next, along the string. Measure the whole string in good light.

✓ CHECK: ABOUT 1 V × NUMBER OF OPTIMISERS



06 Fit the gateway

Mount the GT near the inverter. Last OUT+ → inverter PV+. First OUT− → through the GT's magnetic ring → inverter PV−. Then connect the GT's AC lead (L16-2 connector) to a 90–264 V supply via an MCB.

STEP 4 · SINGLE OPTIMISER READING	
0.9-1.1 V	✓ Normal — carry on
ABOVE 1.1 V	Faulty — replace the optimiser
BELOW 0.9 V	Check light level, then IN wiring. Still low? Replace.
ABOUT -1 V	Meter probes reversed — swap them

STEP 5 · STRING READING	
0 V	Open circuit, or cable on the wrong string
NEGATIVE	Probes reversed or cables mislabelled
LOWER THAN EXPECTED	An optimiser IN or OUT not connected, or OUT reversed
HIGHER THAN EXPECTED	More optimisers than planned, or a panel wired straight into the string

07 Power up & self-test

Inverter DC switch ON. Power the GT — Power and Running lights come on. Press the button once. After 5 seconds, press and hold until lights 2–4 flash, then release. Wait about 10 minutes. Running flashing = pass. Press once more so Running stays on.

✓ CHECK: RUNNING LIGHT STEADY

08 Map in SolarSync

Open SolarSync → Layout → Add. Pick each optimiser's code, set its row and column, Save. Drag to match the roof. Use the layout sheet from step 2.

✓ CHECK: EVERY PANEL SHOWS POWER

GT INDICATOR LIGHTS · 1 POWER · 2 RUNNING · 3 RSD · 4 NET		
●●●●	All off	Wiring fault — check connections
●●●●	1 on · 2 blink · 3 on · 4 on/off	✓ **Self-test passed — running normally**
●●●●	1 on · 2, 3, 4 blink	Self-test in progress
●●●●	1 on · 3 blink · 4 on/off	✕ Self-test failed — check connections, retry
●●●●	1 on · 2 on	Optimisers started, no network
●●●●	1 on · 4 on	Optimisers started, network OK
●●●●	1 on · 3 on · 4 on	Optimisers off (shutdown), network OK
●●●●	1 on · 3 on	Optimisers off (shutdown), no network

SolarSync panel status

- **Green dot** — optimiser working normally
- **Grey dot** — offline. Check serial and position, then search again
- **Red dot** — optimiser failed. Replace it

NEED HELP?

UK technical support

If the self-test fails three times, stop and contact us.
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