



ASSEMBLY & USER INSTRUCTIONS

Solarfy Solo & Solarfy Duo

Plug-in solar for gardens, patios and flat roofs. Ballast-mounted, no roof work, 800 VA.

Solarfy Solo

1 × 455 W module · 455 Wp
Model SFY-SOLO-455-BM · ENA SOLAW/21640/V1

Solarfy Duo

2 × 455 W modules · 910 Wp
Model SFY-DUO-910-BM · ENA SOLAW/21608/V1

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About these instructions

They cover two kits that differ only in the number of modules: **Solarfy Solo** (one 455 W module) and **Solarfy Duo** (two). Inverter, mount, AC lead and connection are the same. Steps for one kit only are marked **SOLO** or **DUO**.

Who may do what

Assembly and the plug connection are designed for a competent adult. **Nothing here authorises work inside your consumer unit or on fixed wiring** — that is for an electrician registered with a Competent Person Scheme (for example NICEIC or NAPIT), working to BS 7671.

BOUGHT WITHOUT THE MOUNTING FRAME?

These instructions and the compliance statement in section 11 cover the kit **on the supplied Kseng ballast frame only**. Do not mount the modules on any other support until we have confirmed it in writing.

QUESTIONS?

support@solarfy.co.uk ·
solarfy.co.uk

Stop and ask before you improvise.
Keep this document and hand it on if you sell the system.

Symbols used



Danger
Risk of death or serious injury.



Fire safety
Limits the spread of fire.



Electrician only
Qualified electrician required.



Warning
Risk of injury or damage.



Legal requirement
Required by UK law or product specification.



Note
Useful information.

Before you begin — the rules

Since 27 August 2026 plug-in solar may be installed in Great Britain without an electrician — as long as the product and the installation stay inside these rules. None of them is optional.

Electrical

- 1 **One plug-in solar device per household.** One system, one socket, one circuit — current GB network rules (EN50498) allow no more.
- 2 **Plug straight into a fixed socket.** No extension leads, multi-way, travel or RCD adaptors, plug converters, timers or smart plugs.
- 3 **A socket circuit with a working RCD or RCBO.** Never a lighting circuit or a spur to a cooker or boiler. Old fuses without RCD: electrician first (section 5).
- 4 **Never connect a battery.** Not a home battery, not a power station, not a DC-coupled unit.
- 5 **One module per inverter input,** never in series. 40.5 V per input against the inverter's 65 V maximum.

Mounting

- 6 **Full, weighed ballast on installation day** (section 4.4). The frame stays put only because of the weight on it.
- 7 **No improvised fixings or changes.** No cable ties, rope, tape or straps as a fixing; no drilling, cutting or welding of frame or module; never open the inverter.

These rules restate requirements of the Plug-in Solar Device Interim Product Specification (DESNZ), SI 2026/848, BS 7671:2018+A4:2026 and ENA Engineering Recommendation G98, together with the mount and inverter manufacturers' instructions. Breaking them can make the installation unlawful as well as unsafe, and voids the warranty.

Where it must never go

- ✗ **On or against restricted cladding** — ACM, MCM, HPL or timber cladding — or on a timber balcony.
- ✗ **On a building undergoing external-wall or building-safety remediation.**
- ✗ **Against a boundary wall or fence** between separate homes, or **in an escape route** or fire-service access.

Not sure what your building is made of? Ask the owner or managing agent **in writing** before you install.

YOUR DUTIES

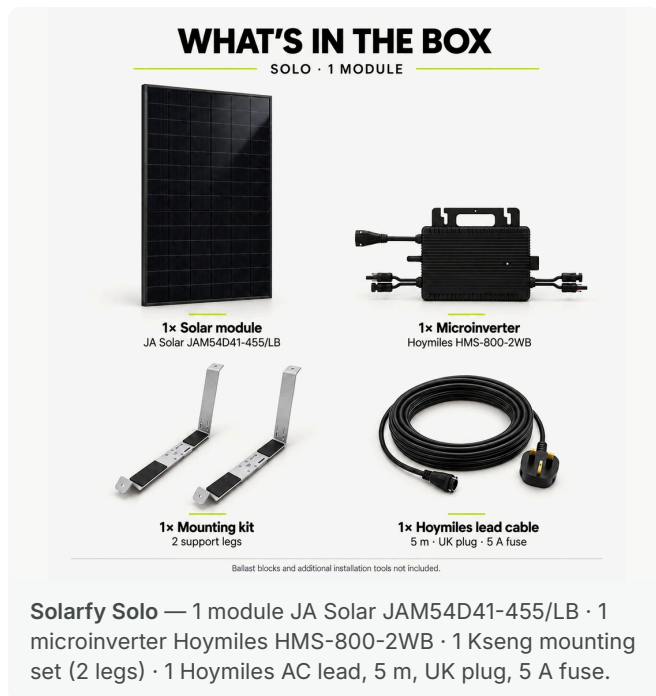
Register the system at myplugin.solar within 28 days of plugging it in, and tell your network operator if you remove it (section 8).

Permission: written consent from your landlord or freeholder if you rent or live in a managed building. Check planning rules if you live in a conservation area or a listed building.

Insurance: tell your home insurer before you install.

1 Your kit

Check the contents against this page before you start. If anything is missing or damaged, stop and contact us.

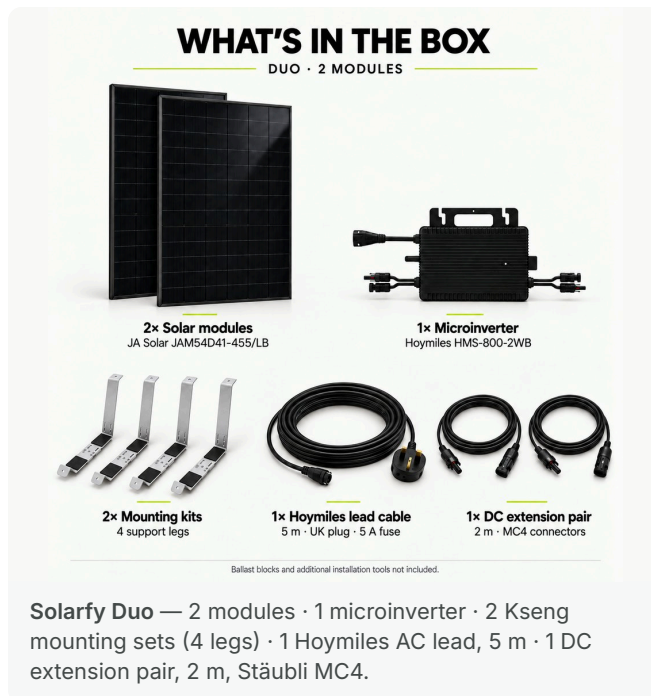


Also in the box

- **Kseng mounting hardware** for each frame: M6 × 16 flange bolts and nuts for the frame.
- **Consumer-unit label** — must be fitted (6.10).
- **DC extension pair 5 m or 10 m**, instead of or in addition to the 2 m pair, if you ordered one (4.5).
- These instructions.

Not in the box — you provide

- **Ballast** — concrete slabs or blocks, weighed (4.4).
- **Inverter fixings:** on the frame 2 × M8 stainless-steel bolts (A2) with nuts and washers; on a wall 2 corrosion-resistant screws with plugs to suit the wall (6.4).
- **UV-stable cable clips or ties** to secure the cables along the frame, a wall or a fence.



Tools you need

- 10 mm spanner or socket — two make it easier
- 13 mm spanner for the M8 inverter bolts
- Spirit level (600 mm or longer) and tape measure
- Bathroom or luggage scales, to weigh ballast
- Cut-resistant gloves
- **A second person** — every module lift is a two-person job

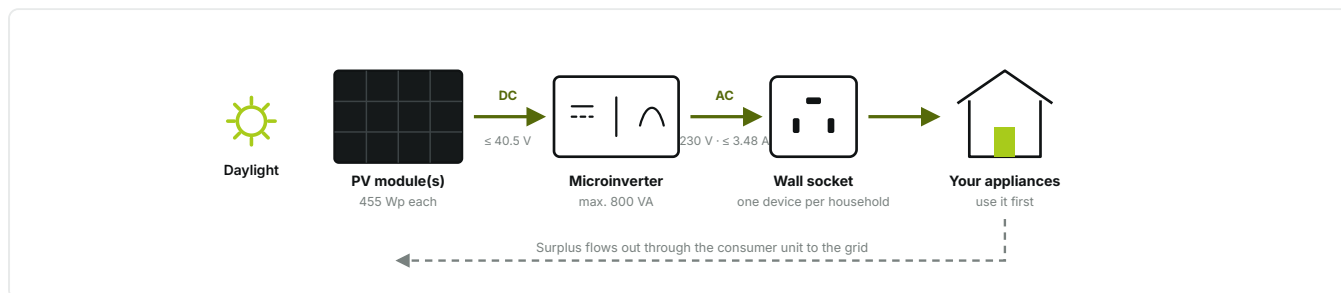
Useful: torque wrench (5–15 N·m), Stäubli MC4 disconnect tool.
For a wall-mounted inverter: drill and masonry bit for the two fixing screws.

⊗ NEVER USE

- An impact driver or power drill on any bolt
- A drill on the module frame or the mounting parts
- A pressure washer, at any time

2 How it works and technical data

The modules turn daylight into direct current. The microinverter converts it into mains electricity and feeds it through the plug into your socket. Your appliances use it first; only the surplus flows out to the grid. Nothing is stored. If the mains fails, the inverter switches off within half a second and produces nothing until the supply returns — a safety feature, not a fault.



SYSTEM	SOLARFY SOLO	SOLARFY DUO
Model · ENA register reference	SFY-SOLO-455-BM · SOLAW/21640/V1	SFY-DUO-910-BM · SOLAW/21608/V1
PV modules · total power (STC)	1 × JAM54D41-455/LB · 455 Wp	2 × JAM54D41-455/LB · 910 Wp
AC output (inverter rating)	max. 800 VA · 3.48 A · 230 V, 50 Hz, single phase. A Solo cannot exceed what one module delivers on one input.	
AC connection	Hoymiles AC lead, 5 m, non-rewireable BS 1363 moulded plug, BS 1362 fuse 5 A	
Frame footprint · height · tilt	1.80 × 1.13 m · 0.70 m · 20°	3.65–3.75 × 1.13 m · 0.70 m · 20°
Clear area needed (4.2)	1.80 × 2.63 m	3.75 × 2.63 m
Mass without ballast · ballast	approx. 32 kg · 100 or 160 kg	approx. 58 kg · 200 or 320 kg
Maximum height above ground	3 m — higher only with a site-specific calculation	
Indicative yield, UK, south, unshaded	approx. 300–400 kWh a year	approx. 600–800 kWh a year

MODULE JAM54D41-455/LB		INVERTER HMS-800-2WB		KSENG BALLAST MOUNT	
Pmax · build	455 W · n-type glass-glass	Rated output	800 VA, 3.48 A	Material	Zn-Al-Mg coated steel
Voc / Vmp	40.5 / 33.3 V	Max. input voltage	65 V per input	Fasteners	M6 × 16 stainless flange bolts
Isc / Imp	14.42 / 13.65 A	Max. input current	2 × 14 A	Design loads	30 m/s wind · 1 kN/m ² snow
Size · mass	1762 × 1134 mm · 22 kg	Protection · cooling	IP67 · natural convection	Certification	TÜV Rheinland, CE

Module connectors: Stäubli MC4-EVO2A. Inverter grid approval: ENA G98, test report TRP-26082101; its protection settings are fixed in firmware and must never be changed.

3 Safety

Read this before you start and again before the first electrical connection. Wrong installation can cause electric shock, fire, structural failure or injury.

A MODULE HAS NO OFF SWITCH

In any daylight a module produces up to 40.5 V at its connectors — even on a dull day, even when covered. Treat DC connectors as live at all times.

- **Unplug the AC lead and wait five minutes** before separating any DC connector.
- Never pull a DC connector apart while the system is running — it arcs and burns.
- Keep connector caps on until you connect; connect dry and clean, push until it clicks.

NEVER CONNECT A BATTERY

This device must not be connected to, operated with or used alongside a battery storage system of any kind.

FIRE SAFETY

- Never on or against ACM, MCM, HPL or timber cladding, on timber balconies, or on a building under external-wall or building-safety remediation.
- Keep escape routes, fire exits and fire-service access clear.
- Not fixed to or leaning on a boundary wall or fence between homes; position the array so it cannot help a fire spread to a neighbour.
- Store nothing under or against the array. Never cover the inverter.

The plug and your circuit

- One socket, one circuit, one device per household.
- Never through an extension lead, adaptor, timer or smart plug.
- Never use a cracked, scorched or loose socket. The plug must sit fully home with no strain on the lead.
- An outdoor socket must be weatherproof (IP66 with the plug in), RCD-protected and fitted by an electrician.
- **Never run any cable through a closed window or door** — the edge crushes it and the damage stays hidden.

LIGHTNING PROTECTION

If the building has a lightning protection system, the array and its cables must keep the separation distance required by BS EN IEC 62305-3. Have the system's designer or an electrician confirm it. Never connect the array to it yourself.

Working safely

- Each module weighs 22 kg and is 1.76 m long: **always two people**, carried on edge, never by the cables.
- Do not handle modules in wind above about 8 m/s (small branches moving), in rain or on wet, icy or frozen ground.
- Flat roofs: never work near an unprotected edge, use proper access (not a ladder) and check for fragile roof coverings and rooflights.

General

- Use the product only as described here. Do not modify it and replace parts only as described.
- The frame carries the module and nothing else — do not sit, stand or climb on it.
- Keep children and animals away during installation.

4 Planning the installation

Settle these points before you open a box: where it goes, how much space it needs, what it stands on, how much ballast it needs, and how the cables reach the socket.

4.1 Choosing the position

MODULE FACES	YIELD
South	100 %
South-east / south-west	96–98 %
East / west	82–86 %
North-east to north-west	not recommended

Shade costs more than direction. A shadow across part of a module pulls down a third of its output. Watch the spot for a whole day — the winter sun is much lower.

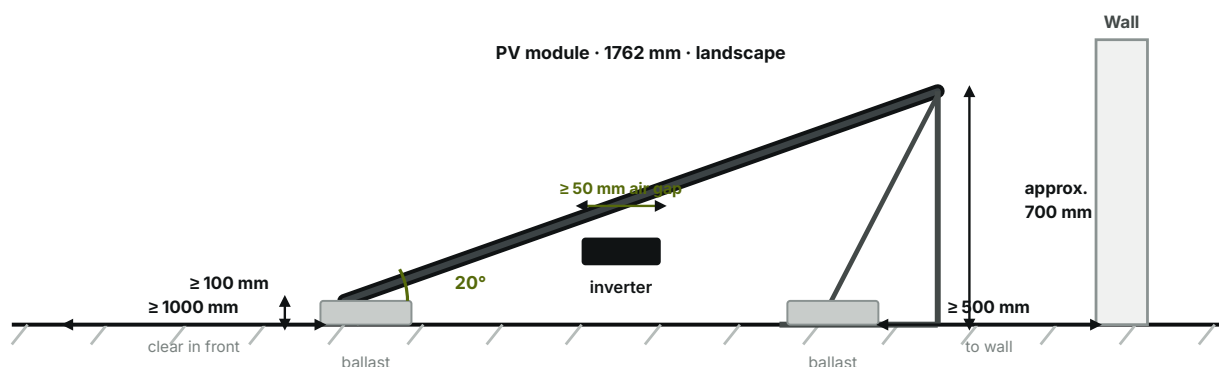
✓ GOOD

- Firm, level, free-draining ground or a sound flat roof
- Unshaded 10:00–16:00, also in winter
- Room for the clear area in 4.2
- Within reach of a suitable socket (4.6)
- Reachable for cleaning, clear of paths

✗ NOT HERE

- Soft, waterlogged or sloping ground
- Under a tree or in a wind funnel between buildings
- Within 2 m of a flat-roof edge
- Against a boundary, across an escape route
- Where glare falls on a neighbour

4.2 The space you need



Side view, minimum clearances. 100 mm free air all round the inverter and 50 mm between inverter and module; 100 mm under the low edge; 500 mm behind the array to a wall or fence; 1000 mm clear in front. The 20° tilt is fixed.

PLAN WITH THE CLEAR AREA, NOT THE FRAME SIZE	SOLARFY SOLO	SOLARFY DUO
Frame only	1.80 × 1.13 m	3.65–3.75 × 1.13 m
Clear area: frame + 0.5 m behind + 1.0 m in front	1.80 × 2.63 m	3.75 × 2.63 m
Flat roof: frame + 2.0 m to every roof edge	roof at least 5.80 × 5.13 m	roof at least 7.75 × 5.13 m

4.3 What it stands on

On the ground

- **Level to within about 20 mm** across the frame — dig out and firm the ground, never pack under a single foot.
- Firm enough not to sink: on lawn or soft soil, bed a paving slab under each foot.
- Free-draining, never a hollow that holds water; not on fresh fill or border edges that settle.

On a flat roof

- **The roof must carry the load:** with category B ballast a Solo adds about 190 kg on roughly 2 m², a Duo about 380 kg on roughly 4 m². If you cannot confirm this, ask a structural engineer.
- Never penetrate the roof covering; put protective mats under the pads.
- Stay 2 m from every edge; keep rainwater outlets clear.

4.4 Ballast

Nothing holds the frame down except the weight on it. Find your site category — if unsure between two, take the higher one.

CATEGORY	YOUR SITE IS IN THIS CATEGORY IF <u>ALL</u> OF THESE ARE TRUE	PER PAD	PER FRAME	DUO TOTAL
A — sheltered	Suburban or urban · buildings or solid fences at least 1.5 m high on the exposed sides within 15 m · at ground level · below 50 m altitude · more than 10 km from the coast	25 kg	100 kg	200 kg
B — standard	Open garden, yard or flat roof · no more than 3 m above ground · below 100 m altitude · more than 5 km from the coast · not on a hilltop or ridge	40 kg	160 kg	320 kg
C — exposed	Anything else: coast, hill or ridge, above 100 m altitude, more than 3 m above ground, or a wind funnel	Do not install. Contact us: a site-specific calculation (BS EN 1991-1-4) is needed.		

Four pads per frame — two at the front, two at the back — with the same mass on each.

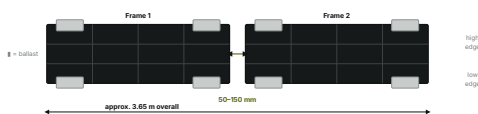
✓ SUITABLE

- Concrete slabs or precast PV ballast blocks
- **Weighed** — never go by size: a 450 × 450 × 50 mm slab often weighs only 22–24 kg
- For example: A — two 450 slabs per pad; B — one 600 × 600 plus one 450 slab per pad
- At most two pieces per pad, the larger one underneath, flat and central

✗ NOT SUITABLE

- Sandbags, gravel bags, water containers, plant pots, logs, loose bricks
- Anything that loses weight as it dries
- Anything easy to lift and carry away
- Blocks on the ground next to the pads instead of on them

Have all the ballast weighed and ready before you start. An unballasted frame with a module on it can be blown over by a moderate gust.



Duo, standard layout. Two independent frames side by side, low edges in line, 50–150 mm apart. Each frame has its own four ballast pads. Do not bolt the frames together.

ⓘ DUO, FRAMES APART

With a 5 m or 10 m DC extension pair (4.5) the second frame may stand further away. Each frame then needs its own level base, clear area and full ballast.

4.5 Where the inverter goes

The inverter always stays **outdoors**. Choose one of two positions; your choice decides which DC extension leads you need.

A On the frame — standard

Bolted to the rear upright of a frame (6.4). The 5 m AC lead runs from the frame to the socket. Use this whenever the array can stand within reach of the socket.

B On an outside wall, near the socket

Fixed to the outside wall of the house, garage or outbuilding (6.4). The modules reach it through DC extension pairs of 2, 5 or 10 m. Use this when the sunny spot is further from the socket than the AC lead reaches.

DC EXTENSION LEADS	SOLARFY SOLO	SOLARFY DUO
A — on the frame	None. The module plugs straight into the inverter.	The supplied 2 m pair connects module 2. Module 1 plugs straight in.
B — on a wall	One pair, 2, 5 or 10 m, long enough for the whole route.	One pair per module, each long enough for its own route.

One pair = one positive and one negative lead for one module. A longer pair **replaces** a shorter one — it is never added to it. Measure the route the cable will actually take and allow some slack.

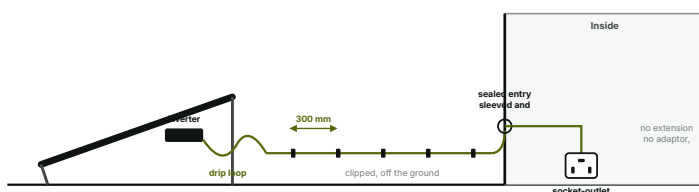
⚡ DC EXTENSION RULES

- Only Solarfy extension pairs with Stäubli MC4-EVO2A connectors — the same as on the modules. Never mix connector makes.
- At most one pair between a module and the inverter, never two joined. Maximum 10 m.
- Clip along the frame, a wall or a fence every 300 mm. Across open ground only inside a UV-stable protective conduit laid on the surface.

⊘ NEVER — DC OR AC

- DC cable indoors, or through any wall, window or door
- Any cable through a closed window or door
- Cable buried, under decking or a doormat, or lying in water
- Cable across a path, drive or lawn where it can be tripped over or mown

4.6 Getting the AC lead to the socket



AC lead, inverter on the frame. Drip loop after the inverter and before any entry, clipped every 300 mm and off the ground, plugged straight into a fixed socket. The lead is 5 m and must not be extended.

Sockets, best first

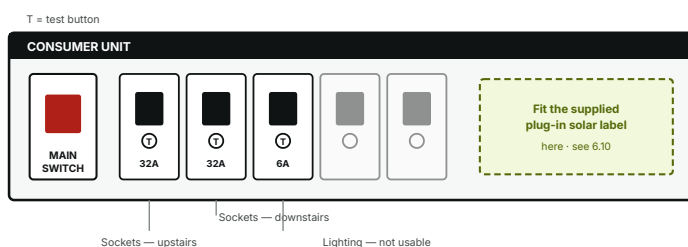
- An outdoor socket**, weatherproof with the plug in (IP66), fitted by an electrician.
- A garage or outbuilding socket** on a suitable circuit (section 5).
- An indoor socket**, with the AC lead through a sleeved and sealed wall entry made by an electrician — for the AC lead only.

If the lead cannot reach a socket on a clear route, move the array, use position B, or have an electrician fit an outdoor socket.

5 Checking your electrical circuit

Four checks, done with your eyes, a lamp and a test button: is the circuit protected, which sockets share it, does the protection work, and is it the right kind of circuit? Nothing is opened and no wiring is touched.

5.1 Look at your consumer unit



A modern consumer unit. Each circuit has its own protective device with a test button marked T. Socket circuits are usually 32 A, lighting 6 A.

GOOD

RCBOs	A row of switches, each with a small T button
RCD plus MCBs	One or two larger switches with a T button, each covering a group

ELECTRICIAN FIRST

MCBs, no T button	No RCD protection
Cartridge or rewirable fuses	An old installation
Unlabelled, damaged or of unknown age	Ask for an electrical inspection (EICR)



DO NOT OPEN THE CONSUMER UNIT

Everything you need is visible with the front flap open. If you cannot tell from outside, call an electrician.

5.2 Which sockets share the circuit?

1 Lamp on

Warn the household. Plug a lamp into the socket you want to use and switch it on.

2 Find the breaker

Switch the breakers off one at a time until the lamp goes out. Note which one it is.

3 Walk the house

With that breaker off, every dead socket is on the same circuit. Write them down.

4 Switch back on

Reset clocks; check the freezer and the boiler are running again.



NOW APPLY THE RULE

No other plug-in solar device may be used **anywhere** in your home — on this circuit or any other. If the consumer unit is unlabelled or you cannot tell which breaker does what, have the installation assessed by an electrician.

5.3 Test the RCD or RCBO

Do this once **before you install**, and then **every six months** with the system running. It is the only way to know the protection still works.

1 Find the device

The RCBO, or the RCD, that protects the circuit from 5.2. Warn the household — an RCD can switch off several circuits.

2 Press T once

Firmly, with the flap open. Do not hold it down.

3 It must trip

The switch drops to off at once; the lamp — or later the inverter — goes off.

4 Switch back on

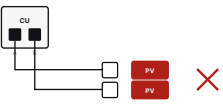
Note the date in the record (section 11). The inverter restarts by itself.

⚡ IF IT DOES NOT TRIP — STOP

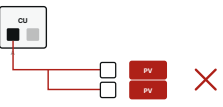
If the device does not trip, will not switch back on, or keeps tripping: **do not install**. If the system is already installed, **unplug it and leave it unplugged** until an electrician has checked the circuit.

5.4 Not permitted

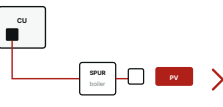
Your one device goes on one ordinary socket circuit. None of these four arrangements is allowed.



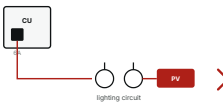
NOT PERMITTED
Two devices, even on separate circuits. One per household (G98).



NOT PERMITTED
Two devices on one circuit. Can overload cable and breaker.



NOT PERMITTED
On a spur to a boiler, cooker or other fixed equipment.



NOT PERMITTED
On a lighting circuit. Smaller cable, smaller breaker.

5.5 Ready to install?

Only when you can tick all six. A “qualified electrician” is registered with a Competent Person Scheme and works to BS 7671.

☐ **The socket circuit has a working RCD or RCBO**
Tested as in 5.3

☐ **It is a socket circuit — not lighting, not a spur**
5.1 and 5.4

☐ **No other plug-in solar device in this household**

☐ **The AC lead reaches the socket directly**
No adaptor, no closed window or door — 4.6

☐ **Ballast weighed and ready on site**
4.4

☐ **Permission obtained, insurer informed**
“Before you begin”

6 Installation, step by step

Allow half a day for a first installation. Work on a dry, still day. Steps marked green need two people.

1 Prepare

Level the base, lay out parts, weigh the ballast.

1 PERSON · 6.1

2 Leg sets

Two L-shaped sets per frame, bolts finger-tight.

1 PERSON · 6.2

3 Fit to the module

Module face-down, leg sets on the factory holes.

2 PEOPLE · 6.3

4 Inverter

On the rear upright (A), or later on a wall (B).

1 PERSON · 6.4

5 Tighten

Every bolt in order, to the torque given.

1 PERSON · 6.5

6 Stand up and ballast

Roll it onto its feet, level it, ballast at once.

2 PEOPLE · 6.6–6.7

7 Connect

DC first, AC lead unplugged; then route the AC lead.

1 PERSON · 6.8–6.9

8 Plug in and finish

Plug in, fit the label, final checklist, register.

1 PERSON · 6.9–8

6.1 Prepare

1 Check the weather

Dry and still, and staying that way. Not on wet, icy or frozen ground.

2 Prepare the base

Level within 20 mm; a slab under each foot on soft ground. Mark the clear area from 4.2.

3 Weigh the ballast

Make up four equal pads per frame (4.4) and stack them next to the base.

4 Lay out and count

Cardboard or a blanket for the module to lie on face-down; parts checked against section 1.



Kits are delivered by two people — and every module lift afterwards needs two people too.

TORQUE — EVERYWHERE

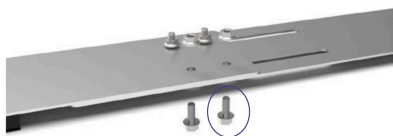
Frame bolts M6: **8–10 N·m**. Inverter bolts M8: **9 N·m**. Without a torque wrench: firm with a short spanner, not your full weight on a long one. Over-tightening distorts the steel and strips threads. **Never an impact driver or power drill.**

BEFORE THE FIRST BOLT

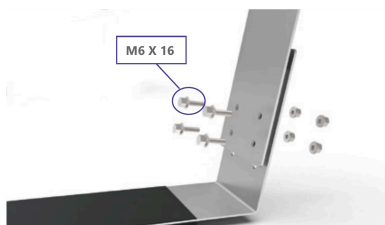
Gloves on. DC connector caps stay on; the AC lead stays unplugged and out of the way; children and animals stay away. **DUO** Build, stand up and ballast the first frame completely before starting the second.

6.2 Build the two leg sets

Each leg set has three parts: front foot **A**, lower rear foot **B** and upright **C**. Build two identical sets per module. **All bolts finger-tight for now** — the sets must still slide.



1 — **A to B**. Slide the slotted ends together; 2 × M6 × 16 through the slots, flange nut underneath.



2 — **C onto B**. 2 × M6 × 16. It fits one way only: flat face forward, towards the low edge. This part sets the 20°.

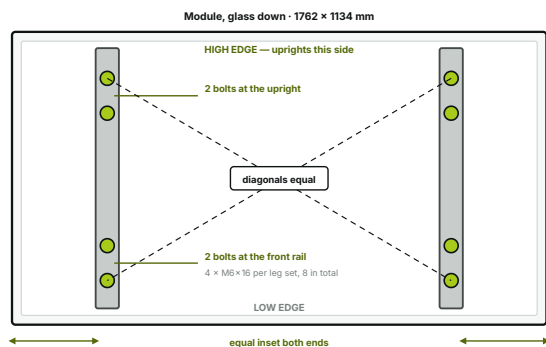


3 — **check and repeat**. An L-shape: long rail with a rubber pad at each end, upright at the back. 4 bolts, all loose. Build the second set.

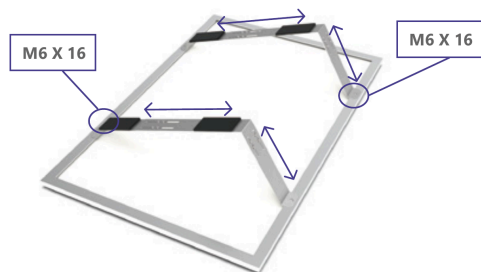
6.3 Bolt the leg sets to the module

⚠ TWO PEOPLE FROM HERE UNTIL THE BALLAST IS ON

Carry the module on edge, one person at each end. Lay it face-down on the cardboard only when it is over the prepared area; check for stones underneath first.



Module face-down, seen from above. One leg set across each end, uprights towards the high edge, bolted through the module's factory holes: 2 bolts at the upright, 2 at the front rail — 8 per module. Slide the sets until both are equally inset and the diagonals match.

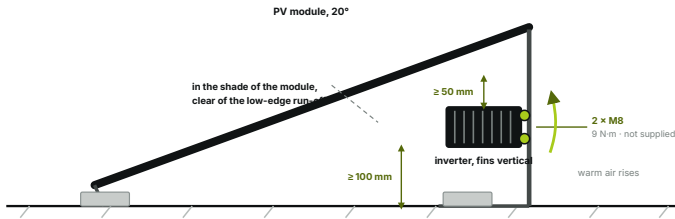


Mount manufacturer's view. Nuts go on the outside of the module frame.

⚠ NEVER DRILL THE MODULE FRAME

Use only the factory holes. A new hole weakens the frame, voids the module's certification and its warranty.

6.4 Fit the inverter



A — on the frame, side view. On the rear upright, in the module's shade: at least 50 mm from the module back, 100 mm free air all round, fins vertical.

A On the frame — fit it now

With the module still face-down: hold the inverter's mounting plate to the rear upright of one leg set and fix it with **2 × M8 stainless bolts (A2), washers and nuts** (not supplied), **9 N·m**. It must not swing or turn. **DUO** On the frame nearer the socket; the other frame carries no inverter.

B On an outside wall — fit it after 6.7

Solid brick, block or masonry, outdoors, near the socket; not on ACM, MCM, HPL or timber cladding, not on a boundary wall, not beside an escape door. **2 corrosion-resistant screws with wall plugs** (not supplied) through the mounting plate. Fins vertical, 100 mm free air all round, at least 300 mm above the ground.

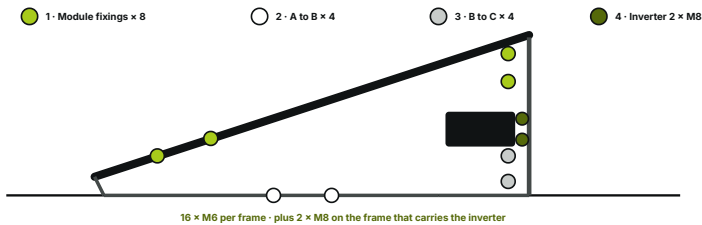
⚠ NEVER ENCLOSE THE INVERTER

No box, cover, bag or wrapping. It is IP67 and built to stay outdoors as it is. Never indoors.

ℹ PHOTOGRAPH THE LABEL

You need the inverter's serial number for the app and your records. Leave every DC connector capped until 6.8.

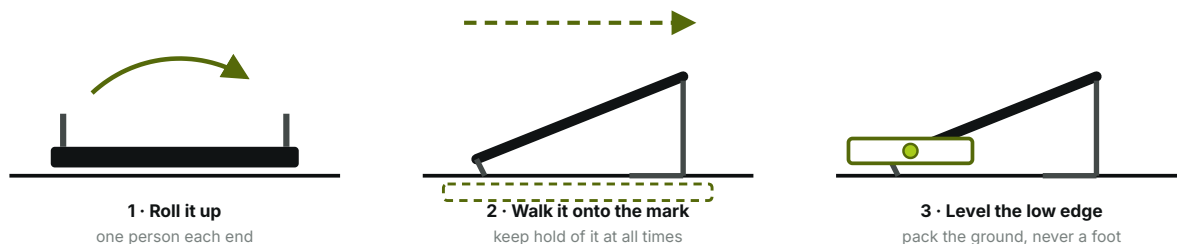
6.5 Tighten everything, in this order



Bolt map. Module fixings first, then the leg joints, then the inverter if it is on this frame. Square and position first — adjust before tightening, never after. Go round once more at the end.

ORDER · JOINT	BOLTS	TORQUE
1 · Leg sets to module	8 × M6	8–10 N·m
2 · Front foot A to B	4 × M6	8–10 N·m
3 · B to upright C	4 × M6	8–10 N·m
4 · Inverter (A only)	2 × M8	9 N·m
Each frame	16 × M6 + 2 × M8 on the inverter frame	

6.6 Stand it up and level it

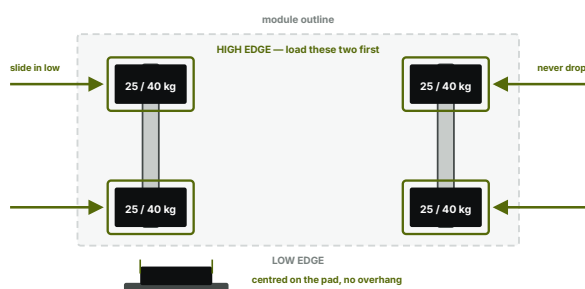


Two people. Roll the assembly onto its feet rather than lifting it flat, walk it onto the marked position and check it faces the direction you chose in 4.1. Level the low edge by firming the ground — never by loosening a bolt or packing under one foot.

⚠ DO NOT LET GO OF IT

Until the ballast is on, one person keeps a hand on the frame at all times. If you have to stop — a phone call, the weather turning — take the module off the frame and lay it flat. A module at 20° is a very effective sail.

6.7 Apply the ballast — straight away



Ballast plan, one frame. Four pads, the same weighed mass on each: 25 kg (category A) or 40 kg (category B).

1 Rear pads first

The wind lifts the high edge, so loading it first steadies the frame.

2 Slide, never drop

Bring each block in low and slide it onto the pad: flat, central, no overhang, not touching the module. Fingers clear.

3 Test it

Push firmly on the high edge: no rocking, shifting or lifting.

⚠ NEVER PARTIALLY BALLAST

"I'll add the rest at the weekend" is how frames end up in a neighbour's garden. Full ballast today, or the module comes off and lies flat.

DUO SECOND FRAME

Now repeat 6.2 to 6.7 for module 2, low edges in line, 50–150 mm apart (or at its own spot with a longer DC pair). Inverter on a wall (B): fit it now.

6.8 Connect the DC cables

⚠ THE AC LEAD STAYS UNPLUGGED THROUGHOUT THIS STEP

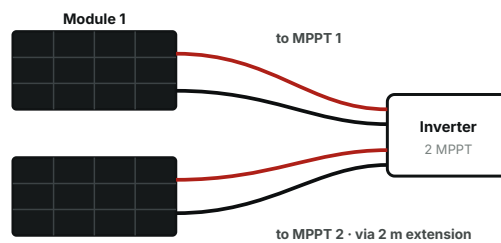
The modules are live in daylight. Connecting them to the inverter is safe as long as nothing is connected to the mains.



MPPT 2 left capped and unused

Solarfy Solo · one module, one input

SOLO One module to one inverter input; the second input stays capped. Inverter on a wall: one extension pair in between.



Solarfy Duo · one module per input

DUO One module per input, at most one extension pair per module. Never in series, never a Y-connector.

1 Check unplugged

Look at the AC plug — do not rely on memory.

2 Plus to plus

Uncap one pair (keep the caps). The connectors are keyed: + to +, - to -.

3 Push until it clicks

Then pull gently — a mated pair will not separate.

4 Clip the cables

Every 300 mm along the frame or route (4.5), with a loop at each connector.

6.9 Connect the AC lead and plug in



Straight into a fixed socket. Outdoors: a weatherproof socket whose cover closes over the plug.

1 Lead to inverter

Line up the Hoymiles connector and push it fully home until it latches. Tug to check.

2 Route and clip

Drip loop below the connector, clips every 300 mm, off the ground, no sharp bends.

3 Plug in

The socket you checked in section 5. Fully home, lead not under tension. Switch on.

4 Wait five minutes

The inverter checks the grid before it starts. Nothing seems to happen at first — that is normal.

⚡ THE LEAD IS PART OF THE PRODUCT

Use only the supplied lead. Never cut it, change the plug, fit a bigger fuse, or use an extension lead or adaptor. Unplug by the plug body, never the cable.

6.10 Fit the consumer-unit label

The label in the box tells an electrician, a surveyor or the fire service that a generator is connected to your wiring. Fitting it is required.

1 Fill it in

Circuit, date connected, inverter serial and registration reference, in permanent marker.

2 Stick it on

At the consumer unit, clearly visible with the flap open, on a clean dry surface. Not inside the unit.

3 Tell the household

Everyone should know the system exists and that unplugging it at the socket switches it off.

4 New consumer unit?

If it is replaced or moved, a new label must go on it. Ask for a replacement: support@solarfy.co.uk.

The label, approximately actual size



PLUG-IN SOLAR GENERATOR CONNECTED

A plug-in solar device is connected to a socket-outlet in this installation. It can energise the circuit in daylight while the mains supply is present.

Isolate by unplugging at the socket.

Circuit

Date connected

Inverter serial

Registration ref.

Solarfy Solo / Duo · Hoymiles HMS-800-2WB · max.
800 VA · 230 V 50 Hz · one plug-in device per
household · support@solarfy.co.uk

TWO STEPS LEFT

Work through the final checklist (section 7), then register the system at myplugin.solar within 28 days (section 8).

Until both are done, the installation is not finished.

7 Final checklist

Go through this with the system running. Every box must be ticked. If one cannot be, unplug at the socket and put it right first.

FRAME AND BALLAST

- ☐ **All bolts tightened, checked twice**
16 × M6 per frame at 8–10 N·m; 2 × M8 inverter bolts at 9 N·m
- ☐ **Frame level along the low edge, not rocking**
- ☐ **Full weighed ballast on all four pads, centred**
A: 4 × 25 kg · B: 4 × 40 kg per frame
- ☐ **Firm push on the high edge: no movement or lift**
- ☐ **No part bent, cracked or under strain**

POSITION

- ☐ **Clearances kept**
100 mm under the low edge, 500 mm behind, 1000 mm in front; 2 m from any flat-roof edge
- ☐ **Inverter outdoors, free air all round, not covered**
- ☐ **No escape route or fire access blocked; nothing against a boundary**
- ☐ **Nothing stored under or against the array**

ELECTRICAL

- ☐ **Every DC connector clicked home, none in tension**
- ☐ **All cables clipped or in conduit, off the ground, out of water**
No DC cable indoors or through a wall, window or door
- ☐ **No Y-connector, no series wiring, at most one extension pair per module**
- ☐ **AC lead plugged straight into a fixed socket**
No extension lead, adaptor, timer or smart plug
- ☐ **RCD or RCBO tested and working (5.3)**
- ☐ **No other plug-in solar device in the household, no battery**

FINISHING

- ☐ **Inverter running, power showing in the app**
DUO both inputs show power
- ☐ **Consumer-unit label filled in and fitted**
- ☐ **Installation record in section 11 completed**
- ☐ **Registered at myplugin.solar, reference noted**
Within 28 days — section 8
- ☐ **Permissions and insurer's confirmation kept on file**

✓ TAKE PHOTOS

Photograph the finished installation, including the ballast and the labels, and keep the photos with this document. Almost every warranty question about a ballasted system is settled by them.

8 Start-up and registration

8.1 First start-up and the app

After you plug in, the inverter checks that the grid is present and stable and waits at least 20 seconds before it starts. Give it five minutes.

Install the **Hoymiles S-Miles** app and add the inverter with its serial number. Connect it to **2.4 GHz Wi-Fi** (5 GHz is not supported). **DUO** If only one input shows power, a DC connection is not made.

Accept firmware updates from Hoymiles, but never modify, downgrade or unlock the firmware — its grid-protection settings are part of the approval. The meaning of the inverter's status light is given in the Hoymiles documentation.

JUDGE IT OVER A WEEK, NOT AN HOUR

On an overcast December day a Solo may produce only 20–40 W. That is the weather, not a fault. Compare weeks, and this June with last June.

8.2 Register the system — a legal duty

WITHIN 28 DAYS OF PLUGGING IN

Register your Solarfy kit at myplugin.solar

The registration site run by the Energy Networks Association passes your notification to the network operator for your address. It is free and takes a few minutes. No permission is needed in advance: the kit is on the ENA register, so you connect first and register afterwards.



YOU WILL BE ASKED FOR	YOUR ANSWER
Your address and email	—
Device · manufacturer · model	Solarfy · Solarfy Solo SFY-SOLO-455-BM or Solarfy Duo SFY-DUO-910-BM
ENA register reference	SOLAW/21640/V1 (Solo) · SOLAW/21608/V1 (Duo)
If asked: inverter · type test · capacity	Hoymiles HMS-800-2WB · TRP-26082101 · 0.8 kW, single phase, no storage
If asked: MPAN and serial number	MPAN is on your electricity bill; serial from the inverter label

KEEP THE REFERENCE

Write it on the consumer-unit label and in the record in section 11.

REMOVING OR REPLACING IT

Register a replacement device at myplugin.solar. If you remove the system for good, tell your network operator and keep their reply.

9 Care, maintenance and troubleshooting

9.1 What to check, and when

Monthly	Output in the app in line with the weather. DUO both inputs reporting.
Every 6 months	RCD/RCBO test with the system running (5.3).
Every 12 months	Bolts tight; frame level; ballast complete and centred; rubber pads intact; no red rust; glass undamaged; cables clipped, undamaged and dry; inverter clear; no new shade. <i>Look — do not unplug DC connectors for a check.</i>
After a storm	Unplug, then the 12-month check — position and ballast first.

⇒ IF THE FRAME HAS MOVED AT ALL

The ballast was not enough for that wind. Put it back, increase the ballast to the next category, and review the site. Already at B? Then it is category C — unplug and contact us.

9.2 Cleaning

Rain does most of it. If needed, unplug, work early or late (never cold water on hot glass), brush off loose dirt and wash with clean water and a soft brush. **Never** a pressure washer, abrasives, solvents or detergents, and never stand or kneel on a module. Let snow melt — do not scrape it off.

9.3 If something is wrong

YOU NOTICE	DO THIS
No output in daylight	Check socket switch, plug and breaker. After a power cut the system restarts by itself.
DUO one input shows zero	Unplug, wait 5 minutes, re-seat both connectors of that module, plug back in.
Output lower than usual	New shade, dirt, something leaning on the array? Clean (9.2).
Flat at 800 W on bright days	Normal: the inverter's maximum.
Stops in the brightest hours	Possibly high grid voltage in your street. Note times from the app and report them to your network operator.
RCD/RCBO trips when plugged in, or does not trip on test	Unplug and leave unplugged. Call an electrician. Do not move the system to another circuit.
Frame rocks or rattles	Re-tighten bolts (6.5), re-level; if it has shifted, see the box on the left.
App offline	The system still works. Check 2.4 GHz Wi-Fi and the serial number.

⚠ EMERGENCIES

First: unplug at the socket — if you can do so safely. This stops the AC side; the modules stay live in daylight.

Broken glass, burning smell, hot or melted connector, damaged lead: keep people away, do not touch, contact us.

Fire: call 999 and say there is a solar system on site. Never water on an electrical fire.

Electric shock: do not touch the person until the supply is off; call 999.

10 Warranty, removal and disposal

10.1 Warranty

COMPONENT	MANUFACTURER'S WARRANTY
PV module (JA Solar)	25 years product · 30 years linear power
Microinverter (Hoymiles)	12 years, on Hoymiles' terms
Mounting frame (Kseng)	12 years

Periods run from delivery — keep your invoice. Your statutory rights under the Consumer Rights Act 2015 apply to the whole kit and are not affected.

Not covered

Installation that departs from these instructions; insufficient or missing ballast; other mounting methods or fixings than specified here; extension leads, adaptors or other leads; any battery; more than one plug-in device per household; modification of frame, module, lead or inverter firmware; pressure washing, solvents, abrasives; damage after delivery from handling, impact, flood, lightning, fire or vandalism.

MAKING A CLAIM

1. Make the system safe: unplug at the socket.
2. Photograph the fault, the whole installation, the ballast and the product labels.
3. Email support@solarfy.co.uk with your order number, the inverter serial and the record from section 11.
4. Do not repair or throw away the component.

10.2 Removing the system

Two people, on a dry and calm day. Never leave a module standing on a frame without its full ballast.

1 Unplug, wait 5 min

Then separate the DC connectors with the disconnect tool and refit every cap.

2 Ballast off

One person holds the high edge. Slide the front blocks off first, then the rear ones.

3 Lay it down at once

The reverse of 6.6: roll it face-down onto cardboard, then unbolt.

4 Label and registration

Remove the label; tell your network operator (8.2). Store modules on edge, never stacked flat.

DISPOSAL

Modules, inverter and cables are electrical equipment (WEEE): take them to a household waste recycling centre, never in the bin. Steel parts are scrap metal, concrete ballast is inert waste. Ask us about take-back: support@solarfy.co.uk.

MOVING HOUSE

Leaving it: hand over this document, the record and the registration reference. **Taking it:** tell the network operator at the old address, register again at the new one, and repeat sections 4 and 5.

11 Compliance and records

11.1 Statement of compliance

Solarfy Ltd states that **Solarfy Solo** (SFY-SOLO-455-BM, ENA SOLAW/21640/V1) and **Solarfy Duo** (SFY-DUO-910-BM, ENA SOLAW/21608/V1), as supplied with the Kseng ballast frame and installed in accordance with this document, comply with the DESNZ Plug-in Solar Device Interim Product Specification. The microinverter Hoymiles HMS-800-2WB is type tested to ENA Engineering Recommendation G98 (test report TRP-26082101).

Max. output · supply	800 VA, 3.48 A · 230 V, 50 Hz, single phase
DC per inverter input	one module, max. 40.5 V (inverter max. 65 V)
Devices per household	1
AC connection	5 m lead, BS 1363 non-rewireable moulded plug, BS 1362 fuse 5 A
Energy storage	none — not for use with a battery

This statement does not extend to a system that has been modified, combined with other equipment, mounted by another method or connected other than through the supplied lead. The signed declaration of conformity, test reports and certificates (G98, UKCA/CE, IEC 61215/61730, TÜV Rheinland) are held by Solarfy Ltd and available on request from support@solarfy.co.uk.

Basis: Plug-in Solar Device Interim Product Specification (DESNZ) · SI 2026/848 · BS 7671:2018+A4:2026 · ENA EREC G98 · BS 1363-1 / BS 1362 · BS EN 62109-1/-2 · BS EN 62116 · IEC 61215 / 61730 · IEC 62852 · BS EN 1991-1-4.

11.2 Installation record

Kit	Solo ☐ Duo ☐
Address	
Date connected	
Module serial(s)	
Inverter serial	
Position · inverter	Ground ☐ Flat roof ☐ · Frame ☐ Wall ☐
Site category · ballast	A ☐ B ☐ _____ kg per pad
Circuit · breaker	
RCD tested (5.3)	Date: _____
Registration ref.	

11.3 Maintenance log

DATE	CHECK	RCD OK	FINDINGS AND ACTION	BY



Need help?

Have your inverter serial number and your installation record to hand. If the system seems faulty, unplug it at the socket first.

SUPPORT, WARRANTY, PARTS

support@solarfy.co.uk
solarfy.co.uk

REGISTER YOUR SYSTEM

myplugin.solar
within 28 days of plugging in

IN AN EMERGENCY

Unplug at the socket if safe to do so.
Fire or injury: call 999 and say there is a solar system on site.

POWER CUT OR ELECTRICAL EMERGENCY

Call 105 to reach your network operator.