

Predicted System Performance

The Microgeneration Certification Scheme sets out how an estimate of system performance must be arrived at. This is known as the standard MCS procedure. Whenever a quotation is issued, it is a requirement that we also issue the following “disclaimer”:

The performance of Solar PV systems is impossible to predict with certainty due to the variability in the amount of solar radiation (sunlight) from location to location and from year to year. This estimate is based upon the standard MCS procedure and is given as guidance only. It should not be considered as a guarantee of performance.

This system performance calculation has been undertaken using estimated values for array orientation, inclination or shading. Actual performance may be significantly lower or higher if the characteristics of the installed system vary from the estimated values.

Roof 1 -

A. Installation data for Solar PV	
Installed capacity of system kWp (4 panels x 405W panels)	1.6 kWp
Orientation (degrees from South)	45°
Roof Tilt (degrees from horizontal)	40°
B. Calculations	
The orientation and tilt above give this solar radiation input (Kk) figure from MCS Irradiance data 5E using the postcode BS2	912
Shade Factor (SF)	1
Estimated annual output	1477.4 kWh

Roof 2 -

A. Installation data for Solar PV	
Installed capacity of system kWp (0 panels x 405W panels)	0.0 kWp
Orientation (degrees from South)	0°
Roof Tilt (degrees from horizontal)	
B. Calculations	
The orientation and tilt above give this solar radiation input (Kk) figure from MCS Irradiance data 5E using the postcode BS2	0
Shade Factor (SF)	1
Estimated annual output	.0 kWh

Roof 3 -

A. Installation data for Solar PV	
Installed capacity of system kWp (0 panels x 405W panels)	0.0 kWp
Orientation (degrees from South)	0°
Roof Tilt (degrees from horizontal)	
B. Calculations	
The orientation and tilt above give this solar radiation input (Kk) figure from MCS Irradiance data 5E using the postcode BS2	0
Shade Factor (SF)	1
Estimated annual output	.0 kWh

Roof 4 -

A. Installation data for Solar PV	
Installed capacity of system kWp (0 panels x 405W panels)	0.0 kWp
Orientation (degrees from South)	0°
Roof Tilt (degrees from horizontal)	
B. Calculations	
The orientation and tilt above give this solar radiation input (Kk) figure from MCS Irradiance data 5E using the postcode BS2	0
Shade Factor (SF)	1
Estimated annual output	.0 kWh
Total kWh	1477.4 kWh

Maximise your Solar System with Battery Storage

A typical system with a Sunsynk Hybrid Inverter, with enhanced functions and performance. This system is all about reducing your energy bill, shorten your investment pay back period, increasing the solar energy yielding and self-consumption rate.

This system also enables you to purchase power and store it in your batteries at cheaper times of the day or night, this is providing your electricity company offers such tariffs, which most now do.

Sunsynk Hybrid Inverter with Sunsynk Lithium Ion Battery Storage

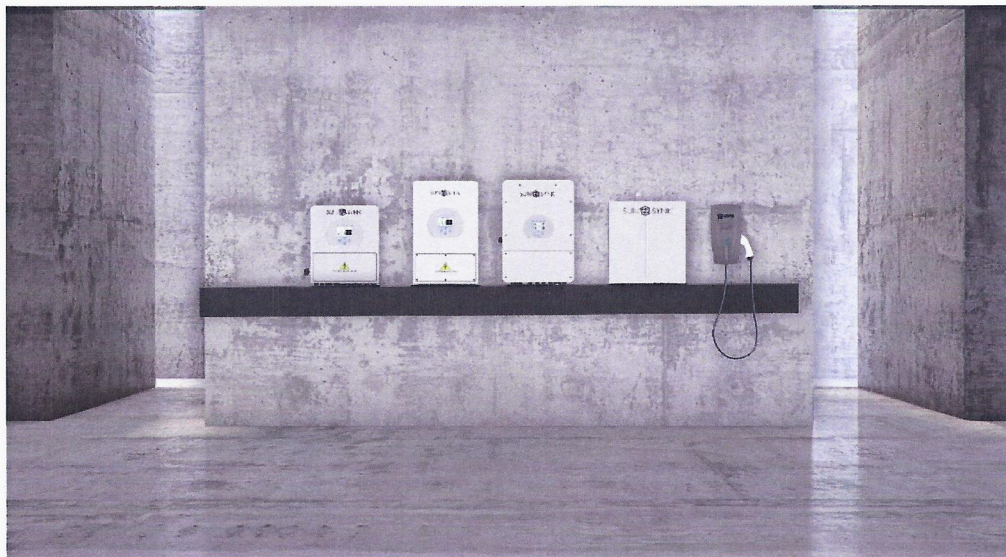
Single phase 16 Amp Hybrid Unit

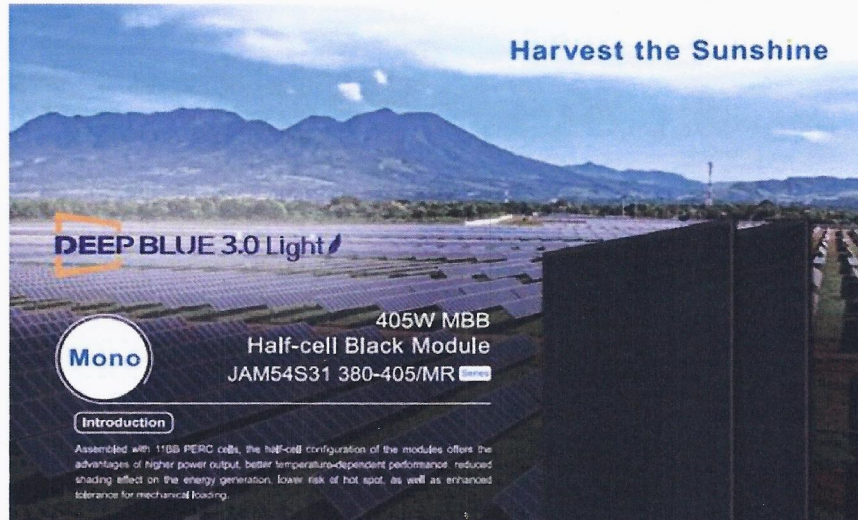
EPS switch facility available

Remote upgrading and monitoring

Lithium Ion batteries in 5.32kw banks (90% DOD - Usable 4.7kW)

The maximum power on the AC side is 3.6kWh as per G98 regulations





Introduction

Assembled with 110B PERC cells, the half-cell configuration of the modules offers the advantages of higher power output, better temperature-dependent performance, reduced shading effect on the energy generation, lower risk of hot spot, as well as enhanced tolerance for mechanical loading.



Higher output power



Lower LCOE



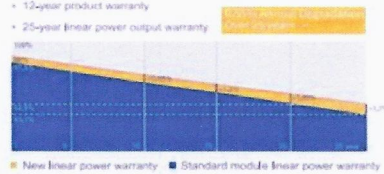
Less shading and lower resistive loss



Better mechanical loading tolerance

Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



■ New linear power warranty ■ Standard module linear power warranty

Comprehensive Certificates

- IEC 61215, IEC 61730, UL 61215, UL 61730
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- ISO 45001: 2018 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval



JA SOLAR

www.jasolar.com

Specifications subject to technical change and audit. JA Solar reserves the right of final interpretation.





RHI-(3-6)K-48ES-5G

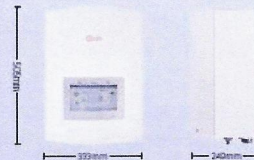
Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ 5kW backup power to support more important loads
- ▶ With shifting and peak shaving capabilities friendly to grid
- ▶ Multiple working modes to make maximize self-consumption, increase benefit
- ▶ Higher charge-discharge efficiency, improving the economic benefits
- ▶ Compatible with lithium & lead-acid batteries, increased more choice in different markets
- ▶ Fanless design, long lifespan
- ▶ Intelligent BMS function, improving battery's reliability
- ▶ With high-frequency isolation technology, making system safer and long lifespan
- ▶ 24-hour fully intelligent energy management, Real-time grasp of PV plant status
- ▶ Remotely control & upgrade function, making digital power plant maintenance at your fingertips



Model:

RHI-3K-48ES-5G	RHI-3.6K-48ES-5G
RHI-4.6K-48ES-5G	RHI-5K-48ES-5G
RHI-6K-48ES-5G	

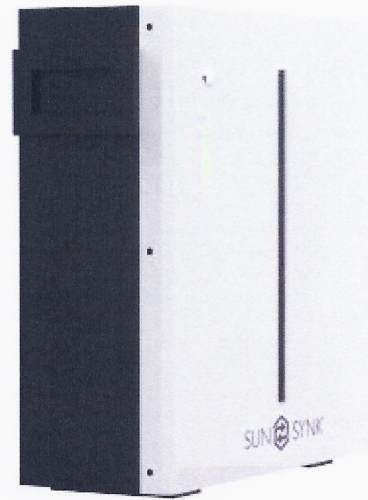
SUN SYNK[®] No Power No Problem

LITHIUM BATTERY

SUN-BATT-5.32

Dimension

450x150x533mm



More Usable Energy
90% Depth of Discharge.



Flexible Investment
Scalable from 5.32 to 85.12 kWh.



Safe & Reliable
Premium Lithium Iron Phosphate(LFP)
6000 cycles.



Easy Installation
Floor Stand or Wall Mounted.



Perfect Compatibility
Compatible with Major PCS Brand.

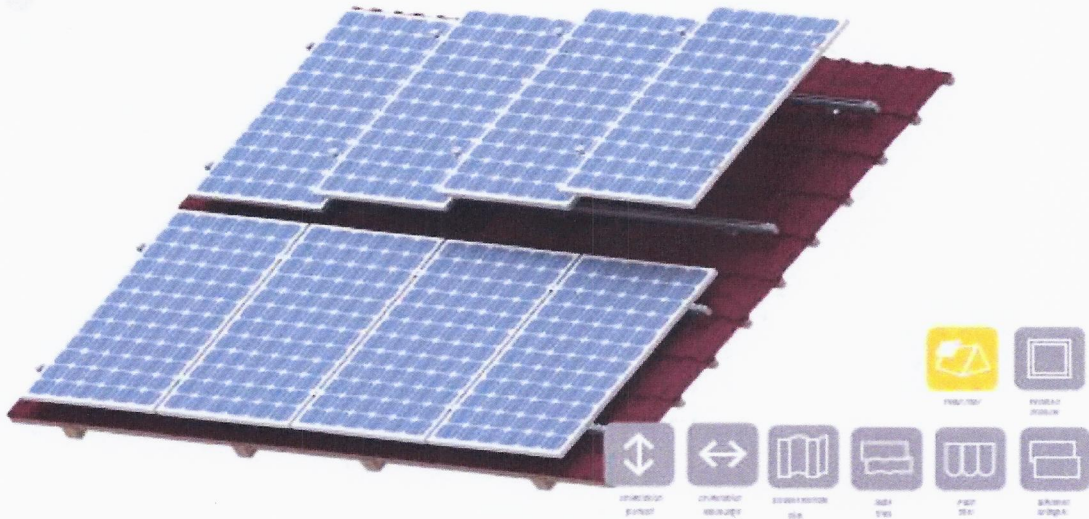


Quick Commissioning
One Button ON/OFF Automatic
ID Assignment.



GS-Tile system

Flush for most tile roofs

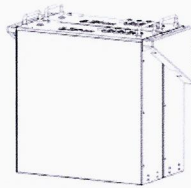
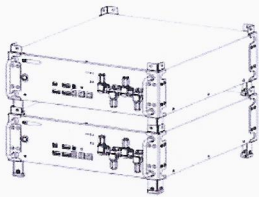


Product Features	
<ul style="list-style-type: none"> • Widely used for both crystalline and thin film module . • Easy & quick installation. • Only 3~4 kinds of components and no more than two kinds of tools in whole system fixation. • All system components are made with high quality aluminum & stainless steel. 	
Technical Data	
Project site	Sloped roof tile
Tile type	Most tile roof
Slope of roof	Up to 60°
Max Building Height	Up to 20m
Wind Load	60m/s
Snow Load	2.0kn/ m ²
Applicable Module	Frame / frameless module, crystalline/ thin film module
Module Orientation	Landscape or portrait
Standard	MCS, AS/NZS 1170.2:2011
Material	Stainless steel 304, Al6005-T5

Added Extras to SAVE you MORE Money

Optimisers - £95 per Panel

In the event of shading on your roof, an optimiser can be added to each panel to optimise each panel, so the shading will not reduce the overall performance of the system.



Battery Brackets - From £250 per battery

Mount the batteries on the wall underneath your inverter. Keeping them neatly placed for the life of the system. Two batteries can hang from one bracket. The brackets will come away from the wall by 260mm.

Stack your batteries on top of each other leaving a small gap

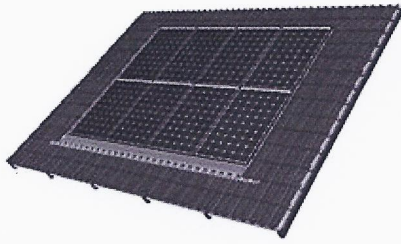
E.V Smart Charger - From £1100

Contact Solar are an accredited company for installing electric vehicle chargers. The car chargers have the ability to work with your solar PV system. The rate of charge will vary dependant on your yield and household consumption. The car charger we install will be untethered, future proofing your charge point.



Sun Tubs Installation

Contact Solar are an accredited company for installing sun tubs. They are used for properties with flat roofs, so the panels can be mounted at a slight angle.

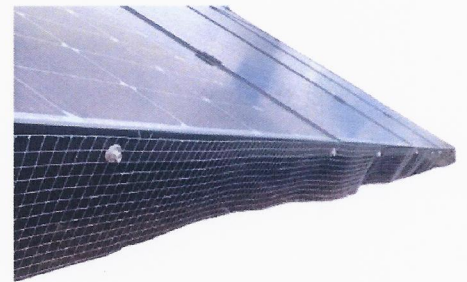


In Roof Mounting System - £150 extra Per Panel

An in roof mounted system also offers an aesthetic appeal. Have your solar panels sitting in roof. The panels will be sat in trays which are screwed directly into the batten. This will save you money on roof tiles. Price is based on no tiles being on the roof.

Pigeon Deterrent - from £38.50 per meter

If birds are an issue in your area wire protection can be added around the base of the panels to stop birds from getting underneath them. The wire will be attached directly to the



Our Prediction of the Performance of the Proposed System

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By using this procedure we have estimated that the system proposed would produce:

1403.6 Kilowatt hours

For more details please see “Predicted System Performance”

Additional Information

Timetable of Works

If you decide to accept our quotation, your sales adviser will send you a confirmation email along with a signature request to accept the price agreed in the order form. The next step would be to arrange a survey. A member of the department will give you a call to arrange a mutually agreeable date to come and take some measurements. Once the survey has been completed you will receive a follow up call. If an altered quotation is needed, this will also be sent. The installations team will also arrange a mutually agreeable date to begin the installation. We endeavour to complete all installations within 1 working day, however, in some instances this may require a revisit. We aim to book you back in to complete the work as soon as possible. If scaffolding is required to complete your install, a member of the team will contact you prior to the installation to arrange a suitable date. The scaffold will be left up for 7-10 days after installation to allow for maintenance, should a fault occur.

It is not our normal policy to begin work within the 'cooling off' period. If you should require us to do so you must fill out the Express Request Form and return it to us. Should you decide to take this course of action, and you decide to cancel the installation, you will be liable for the costs incurred to us for any work done and materials ordered up to this point.

Costings

This quotation has been based on us being able to install your system as described without interruption. Should there be circumstances beyond our control which cause an interruption to the installation process we will discuss the implications with you for such a delay.

Should you decide to make any changes to the agreed installation within or after your 'Cooling Off' period, we will produce another full quotation which considers these changes. However, we reserve the right to add any additional charges for costs we will incur due to these changes. Should you request to make changes after the installation has begun, we will provide you with details of the additional costings. Should you wish to make any changes to the install after you have signed the job off as being completed, you will be liable for these costs.

If during the installation process, we come across any situation that we could not reasonably be expected to foresee, for example, remedial electric or building work, we will discuss with you the implications and costs involved in rectifying the problem. Should your ridge tiles need to be removed during the installation, it will be the customers responsibility to have these tiles replaced. Contact Solar will accept no liability for any damages to the property whilst the customer is waiting to have these tiles replaced.