

Sunlit Solar's Community Cooperative Package

At Sunlit Solar, we are committed to working together with communities to help achieve their zero carbon goals. When a community comes together to order Solar arrays in bulk, we can provide a lower price but still with the high quality that our customers expect from us. This document provides a summary of the 3.7kw system that we can install for less than £4,000. This package assumes at least 10 arrays being ordered in Glastonbury.



We pride ourselves on providing high-quality installations tailored to the best fit for each customer. We only use trained installers for our surveys, never a salesman, to ensure that our initial estimates are as accurate as possible. We appreciate that our Community Cooperative Package will not fit every requirement and some customers will want a bespoke system. In these cases, we will apply a 10% discount to our usual price. All of our materials are from well-established manufacturers with a history in renewable energy and technological development. They are installed to the highest standards possible by a team of dedicated professionals from the Sunlit Solar team.

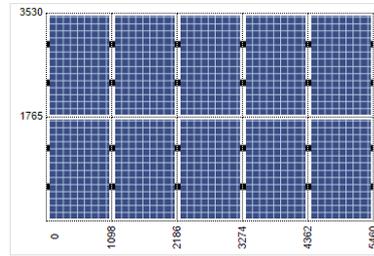


The package array below is based on a slightly off-South facing roof and has 10 panels. It is a 3.7kw system and the price of £3,968.13 includes all of the equipment and installation.



Array Design & Production Summary

3.70kW Canadian Solar (10x378w) + Solis – South -30°



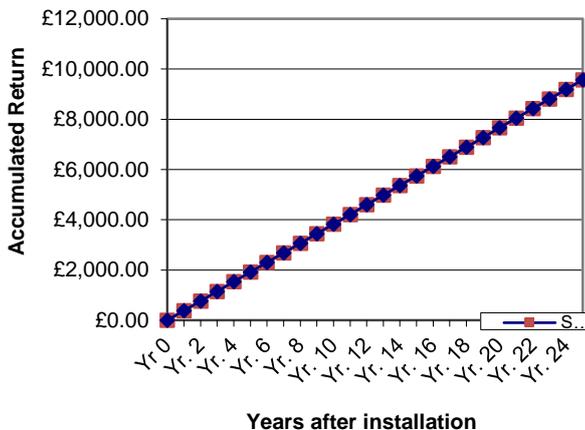
Estimated Production Level & Return

KWph PA	3389
Total Return 20 Yrs	£9,573.91
Av. Annual Return	£382.96
Annual R.O.I	10.13%
Year of payback	10
Cost (exc VAT)	£3,779.17
Cost (incl VAT)	£3,968.13

System Details

System Size (Kw)	3.7
Sq. M. of panel req.	19.27
Elevation	35°
Orientation	South -45°
Shading	Little

Cumulative Annual Return



As MCS certified installers, the levels of production in our estimate are based on the 2005 SAP calculations as stated in the MCS documentation. This means that all systems of an identical size should have the same levels of output.

The performance of Solar PV systems is impossible to predict with certainty due to the variability in the amount of the solar radiation (sunlight) from location to location and from year to year.

This estimate is based on the government's Standard Assessment Procedure for energy rating of buildings (SAP) and is given guidance only. It should not be taken as a guarantee of performance.

Return Illustration

The illustrations above show the potential value of the electricity generated by your PV system under the terms of the Smart Export Guarantee which replaces the Feed-in tariff. Calculations are based on the following formula found in the SAP 2009 document "0.8 x kWp x S x Kpv" Where kWp is the size of the installed system, S is the radiation value and Kpv is the shading value.

System Size & Output

Installed system size	*3.55kWp
Estimated Annual system output (Gd)	*3404 kWh

Basic Payback Calculation

Proportion of electricity generated exported to grid (Ex) :	*50%
Standard import tariff at average unit price (It)	*£0.17
Proposed export tariff4 (Et)	*£0.055

Annual Value of feed in tariff	$V_f = G_d \times F_t$
Annual Value of electricity consumed	$V_c = G_d \times (100 - Ex) \times I_t$
Annual value of electricity exported	$V_e = G_d \times Ex \times E_t$
Total Value of electricity generated	$V_t = V_f + V_c + V_e$
Basic Payback	$P_y = Cost / V_t$

Equipment Summary

The Inverter

Solis Inverters are a division of Ginlong Technologies, which has been manufacturing Solar and Wind Generator Inverters and Wind Generators for over 20 years. Ginlong prides itself on offering world class design and quality, while retaining competitive pricing. The Solis inverters represent a well-respected, value priced brand of inverters and come with a five-year warranty as standard with an optional 10-20-year upgrade.



Manufacturer:	Solis
Rated Power:	3,600W
Weight:	9.5kg
Max DC Power:	4,000W
Max AC Power:	3,600W
Warranty:	5yrs

The Monitoring

We can also provide a Solis monitoring device with all the installation that allows remote monitoring of the production levels of the inverter and the system in its entirety to ensure that you are able to see how well your system is performing as it should. (The monitoring is not included in the quote)



The Panels

These attractive modules are manufactured by Canadian Solar Inc., one of the leading solar manufacturers in the world, delivering industry leading high efficiency solar cells, solar modules, solar power systems and off grid solar power application solutions. Combining the best technology and design. The higher power output in restricted spaces, at pleasantly surprising prices gives you more "bang for your buck".



Manufacturer:	Canadian Solar
Watts per panel:	370w
Cell Type:	Monocrystalline
Efficiency:	20%
Warranty at 25 yrs:	80%
Dimensions mm:	1765 x 1048 x 35
Weight:	18kg

Equipment List

Item #	Description	Quantity	Part Number	
Solar & Electrical Equipment				
1	Canadian Solar 370W Super High Power Mono PERC HiKU with MC4-EVO2	10	CS3L-370MS-MC4	
2	Solis 3.6kW Mini 4G Single Tracker 2x String	1	SOL-3.6-MINI-4G	
3	Dektite Lead Multicable Solar Flashing (Tiled or Slate)	1	DNLS10MB	
4	End Clamp+ 30 - 50mm Silver	8	REN-420081	
5	Middle Clamp+ 31 - 51mm Silver	16	REN-420082	
6	Wood screw pan head 6 x 80 (Bag of 21)	4	REN-900305-21	
7	Roof hook UK Flexible (without wood screw)	28	REN-420182	
8	VarioSole + End Cap 41X35 rail Single - Grey	8	REN-900246	
9	VarioSole+ Rail connector for rail 41 x 35 mm	4	REN-400531	
10	VarioSole+ Mounting rail 41 x 35 x 2250 mm	4	REN-400523	
11	VarioSole+ Mounting rail 41 x 35 x 3300 mm	4	REN-400524	
12	MC4 Pre terminated cable 2m (Pack of 2)	1	MC4-2M-2	
13	MC4 Connector Twin Pack (Kit 1)	1	MC4-CONN-2PACK	
14	4mm2 single-core DC cable 25m - Black	1	CABLE4-1-25	
15	K&N Single Phase AC Switch Disconnecter 25A	1	KG20-T203-GBA294	
16	K&N Single String DC Switch Disconnecter 25A 450V - 11A 920V	1	KG20-T104D	
17	Emlite 1-ph generation meter 100A (1000 pulse/kWh) incl. Cover	1	EM-ECA2	
18	PV on Roof and Hazard Labels Pack	1	BOHAZARD-SET	
Delivery				
19	Packaging and delivery			
Installation & Scaffolding				
20	Approximate Time: 2/3days			
Sign off				
21	DNO liason, MCS Certification			
			Total Net Cost	£3,779.17
			VAT @ 5%	£188.96
			Total Cost with VAT @5%	£3,968.13

Before ordering your confirmed system, we will take exact roof measurements to make sure all Building Regulations are satisfied. This includes Snow Loading and Wind Shear factor calculations.

A structural review can be provided from an independent company to ensure that the roof strength is sufficient to support the specified system.

Works quoted for include all solar installation work up to the local isolation points and AC meters. An adequately sized armoured cable (and comms cable, cat 6 UTP) should be supplied from the inverter location back to the point of distribution upon where isolation points and correct sized breaker should be fitted and sufficient space in the distribution board should be left.

We have not allowed for powered access of modules onto loading platform.

We have also not included any liaising with or DNO pre application or DNO witness testing (if necessary).

All relevant paperwork regarding the installation would be completed by us.

If you would like to make any other suggestion or amendments to my proposals, I would be only too pleased to discuss them with you.

We would be available to carry out the work as soon as possible.

All Payments must be received from the completion of installation, upon which time the MCS certificate is issued.

Yours Sincerely



.....
MJD Rogers
Managing Director

Accreditation

To ensure that we meet high standards in all of our installations Sunlit are fully accredited for the Micro-Generation Certification Scheme (M.C.S.) that allows us to accredit installations for the government backed 'Clean Energy Cashback' initiative. Only installations by accredited firms will be eligible for payback through the feed-in-tariff.

To protect our customers further we are also members of the REAL assurance scheme that is designed to ensure that consumers of renewable energy solutions are sold to and supplied under safe guidelines.

