

Thank you for getting in touch with Sunlit Solar!

At Sunlit Solar, 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.

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.

We are a friendly, family run business with over 20 years' experience in the industry and we believe passionately in a future powered by the sun.



As per the images below, we have put this pack together to provide indicative pricing for 4 different options of system. All pricing is approximate and a site survey would need to be carried out in order to ensure that your roof would be suitable for these options. The example roof we have used is almost south-facing, so this is a factor that would need to be taken into consideration when comparing returns with an array on your own roof. The first two options are for systems with an installed net capacity of 3.7kw, they have an array design of 10 all-black JA Solar 370w arranged in two neat rows of 5 modules in portrait. The second two options are for systems with an installed net capacity of 7.4kw, they have an array design of 20 all-black JA Solar 370w arranged in two neat rows of 10 modules in portrait. The main difference between options 1 and 2 and options 2 and 3 are the different inverters. Options 1 and 3 include a less sophisticated inverter manufactured by Solis whereas options 2 and 4 use the very sophisticated Solar Edge technology with in the array. The fully-optimized SolarEdge systems combine sophisticated, digital control technology to achieve superior solar power harvesting and best-in-class reliability. The Solar Edge system would come at a premium so would reduce your return although SolarEdge promote 25% better yield using their system, which unfortunately we cannot illustrate to you due to MCS and RECC guidelines, but if that were the case the extra initial outlay would be worth it. There is more information on Solar Edge on page 7 of this document.



Option 1 - Array Design & Production Summary

3.7kW JA Solar (10x370w) + Solis – South 5°

Estimated Production Level & Return		System Details	
KWph PA	3589	System Size (Kw)	3.7
Total Return 20 Yrs	£13,681.86	Sq. M. of panel req.	19.11
Av. Annual Return	£547.27	Elevation	35°
Annual R.O.I	9.67%	Orientation	South 5°
Year of payback	10	Shading	Little
Cost (exc VAT)	£5,658.85		
Cost (incl VAT)	£5,941.79		

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 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 as 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	*3.7kWp
Estimated Annual system output (Gd)	*3589kWh

Basic Payback Calculation

Proportion of electricity generated exported to grid (Ex) :	*50%
Standard import tariff at average unit price (It)	*£0.25
Proposed export tariff (Et)	*£0.055
Annual Value of feed in tariff	Vf = Gd x Ft
Annual Value of electricity consumed	Vc = Gd x (100-Ex) x It
Annual value of electricity exported	Ve = Gd x Ex x Et
Total Value of electricity generated	Vt = Vf + Vc + Ve
Basic Payback	Py = Cost / Vt

Option 1 - 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:	11.5kg
Max DC Power:	4,200W
Max AC Power:	3,680W
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. (The monitoring is not included in the quote)



The Panels

JA Solar modules reduce cell series resistance and stress between cell interconnectors improves module reliability and module conversion efficiency.

Features;

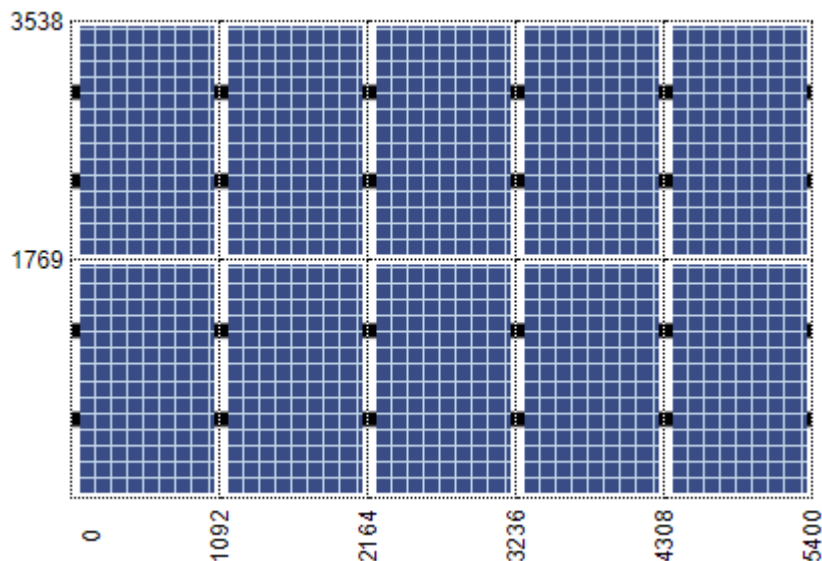
- High output power
- Less shading effect
- Lower temperature coefficient
- Better mechanical loading tolerance



Manufacturer:	JA Solar
Watts per panel:	370w
Cell Type:	Monocrystalline
Efficiency:	19%
Warranty:	12 yrs
Dimensions mm:	1689 x 996 x 35
Weight:	18.7kg

Option 1 - Equipment List

Item #	Description	Quantity	Part Number	
Solar & Electrical Equipment				
1	JA Solar 370W Mono MBB Percium Half-Cell All Black Short Frame	10	JAM60S-21-370-MR	
2	Solis 3.6kW 5G Dual MPPT - Single Phase with DC	1	SOL-3.6-5G-DT-DC	
3	Dektite Lead Multicable Solar Flashing (Tiled or Slate)	1	DNLS10MB	
4	End Clamp+ 30 - 50mm Black	8	REN-420081-B	
5	Middle Clamp+ 30 - 50mm Black	16	REN-420082-B	
6	Wood screw pan head 6 x 80 SIT30 Single (900318) (Pack of 21)	4	REN-900318-21	
7	Roof hook UK Flexible (without wood screw)	28	REN-420182	
8	VarioSole + End Cap 41x35 rail Single - Black	8	REN-900245-B	
9	VarioSole+ Rail connector for rail 41 x 35 mm	4	REN-400531	
10	VarioSole+ Mounting rail 41 x 35 x 3300 mm BLACK	2	REN-400524-B	
11	VarioSole+ Mounting rail 41 x 35 x 4400 mm BLACK	4	REN-400525-B	
12	MC4 Pre terminated cable 2m (Pack of 2)	1	MC4-2M-2	
13	MC4 Connector Twin Pack (Kit 1) 0014/0015	2	MC4-CONN14-2-PACK	
14	4mm2 single-core DC cable 50m - Black	1	CABLE4-1-50	
15	K&N Single Phase AC Switch Disconnecter 25A	1	KG20-T203-GBA294	
16	Emlite 1-ph generation meter 100A (1000 pulse/kWh) incl. Cover	1	EM-ECA2	
17	PV on Roof and Hazard Labels Pack	1	BOHAZARD-SET	
Other Equipment				
18	Scaffolding, Packaging and Delivery			
Installation, Commission and Sign off				
19	Approximate Time: 2/3days for 2/3 people			
20	MCS Certification & DNO Notification			
Solar PV Total Net Cost				£5,658.85
Total Net Cost				£5,658.85
VAT @ 5%				£282.94
Total Cost with VAT @5%				£5,941.79



Option 2 - Array Design & Production Summary

3.70kW JA Solar (10x370w) + Solar Edge – South 5°

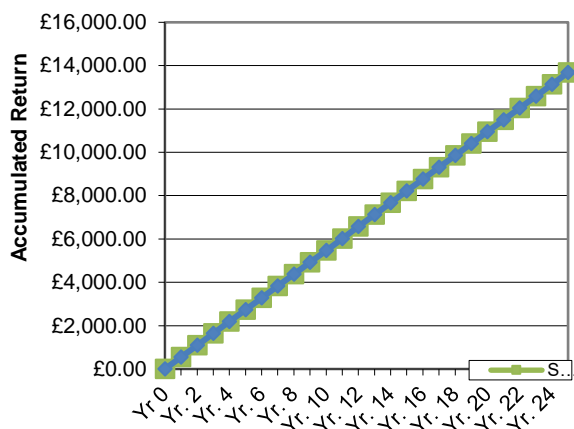
Estimated Production Level & Return

KWph PA	3589
Total Return 20 Yrs	£13,681.86
Av. Annual Return	£547.27
Annual R.O.I	7.79%
Year of payback	13
Cost (exc VAT)	£7,029.52
Cost (incl VAT)	£7,380.99

System Details

System Size (Kw)	3.7
Sq. M. of panel req.	19.11
Elevation	35°
Orientation	South 5°
Shading	Little

Cumulative Annual Return



Years after installation

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 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 as 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	*3.7kWp
Estimated Annual system output (Gd)	*3589kWh

Basic Payback Calculation

Proportion of electricity generated exported to grid (Ex) :	*50%
Standard import tariff at average unit price (It)	*£0.25
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	$P_y = \text{Cost} / V_t$

Option 2 - Equipment Summary

The Inverter

The SolarEdge inverters combine a sophisticated, digital control technology and a one stage, efficient power conversion architecture to achieve superior solar power harvesting and best-in-class reliability. The fixed-voltage technology ensures the solar inverter is always working at its optimal input voltage, regardless of the number of modules in a string or environmental conditions.



Manufacturer:	Solar Edge
Rated Power:	3,680W
Weight:	7.8kg
Max DC Power:	7,360W
Max AC Power:	3,680W
Warranty:	12yrs

The Optimisers

SolarEdge power optimisers maximise energy from each panel through constant tracking of Maximum Power Point per panel. Optimal efficiency is achieved by automatically maintaining a fixed string voltage and performance can be monitored via the SolarEdge monitoring portal. Each power optimiser is equipped with the unique SafeDC feature which automatically shuts down module voltage whenever inverter or grid power are shut down.



The Monitoring

Monitoring is vital, especially when trying to promote green credentials but more importantly from a system verification point of view. The monitoring that we are suggesting would provide "live" real time feedback on how the system is operating, what it's producing, and whether it is operating correctly. Solar edge does this on a panel-by-panel basis making fault finding and shading obsolete. The system also allows you to view all the same data from your smartphone, tablet or laptop, meaning you can access your systems performance output from where ever you are in the world.

Solar edge Full system & Free 3rd party Monitoring Including "live" via Monitor, PC, Laptop, or smartphone using WiFi or CAT5e



JA SOLAR

The Panels

JA Solar modules reduce cell series resistance and stress between cell interconnectors improves module reliability and module conversion efficiency.

Features;

- High output power
- Less shading effect
- Lower temperature coefficient
- Better mechanical loading tolerance

Manufacturer:	JA Solar
Watts per panel:	370w
Cell Type:	Monocrystalline
Efficiency:	19%
Warranty:	12 yrs
Dimensions mm:	1689 x 996 x 35
Weight:	18.7kg

Benefits of SolarEdge

SolarEdge is the World's #1 Home Solar Energy System.

Why do most of the world's homeowners who are shopping for a solar energy system choose SolarEdge?

The answer is simple. SolarEdge systems deliver more of what you buy a solar energy system for – power. Each solar module (also called a solar panel) on your roof is connected to a SolarEdge Power Optimizer which transforms it into a smart module. Working together with our high efficiency inverters, they harvest the maximum amount of energy possible, regardless of shading, soiling, and other factors to provide your home with more electricity over the system's lifetime.

Full Roof Utilisation

SolarEdge allows you to put more panels on the roof in a more aesthetic manner. Mix different orientations and panel types to maximize PV power production out of your roof space.



More Energy

With traditional inverters, output of all panels is affected by the weakest panel and there are substantial energy losses due to unevenly dirty and shaded panels. Get maximum power out of each panel with the SolarEdge system.

Maximum system uptime

A SolarEdge system not only lowers your electricity bills, it is also designed to meet your evolving energy needs and to protect your investment. Keeping track of your energy production and consumption is easy with your free* mySolarEdge app. This intuitive application runs on your mobile device to give you a real-time dashboard of your energy production and consumption. Your installer gets their own application - the SolarEdge Monitoring Platform - which provides remote monitoring and maintenance down to the level of each individual solar panel. You can see your savings in real time!



Superior Safety

Assets and people are protected through automatic shutdown of the high DC voltage during installation, maintenance and emergency.

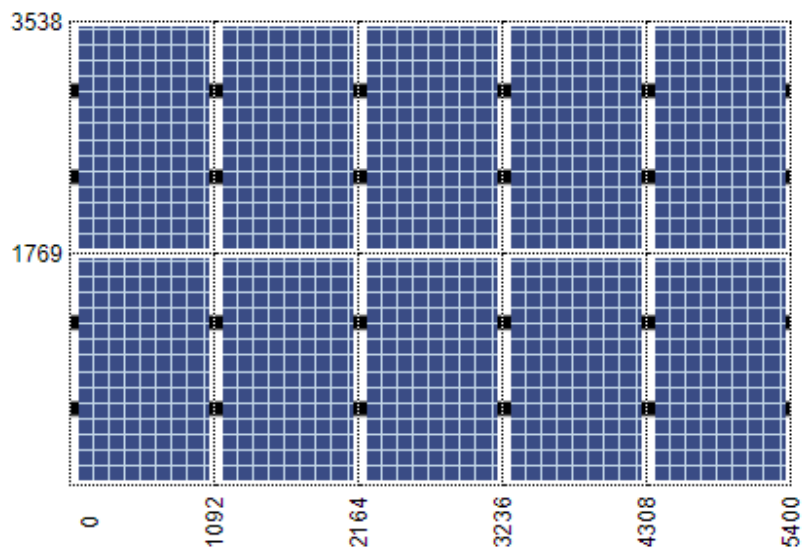


In summary; Why SolarEdge?

- **Financially Strong** – SolarEdge is a bankable company, publicly traded on the Nasdaq and profitable.
- **Superior Service** – Local teams offer remote and onsite support.
- **High Quality Manufacturing** – production in Europe and China.
- **Warranty** – 25 years power optimiser warranty, 12 years inverter warranty.

Option 2 - Equipment List

Item #	Description	Quantity	Part Number	
Solar & Electrical Equipment				
1	JA Solar 370W Mono MBB Percium Half-Cell All Black Short Frame	10	JAM60S-21-370-MR-AB-MC4	
2	Solar Edge S440 Power Optimizer	10	S440-MC4	
3	SolarEdge 3680W Single Phase HD Wave Inverter NO DISPLAY	1	SE-3680H-APP	
4	Dektite Lead Multicable Solar Flashing (Tiled or Slate)	1	DNLS10MB	
5	End Clamp+ 30 - 50mm Black	8	REN-420081-B	
6	Middle Clamp+ 30 - 50mm Black	16	REN-420082-B	
7	Wood screw slated tiles countersunk 6 x 80 (Pack of 21)	4	REN-900013-21	
8	Roof hook UK Flexible (without wood screw)	28	REN-420182	
9	VarioSole + End Cap 41x35 rail Single - Black	8	REN-900245-B	
10	VarioSole+ Rail connector for rail 41 x 35 mm	4	REN-400531	
11	VarioSole+ Mounting rail 41 x 35 x 3300 mm BLACK	2	REN-400524-B	
12	VarioSole+ Mounting rail 41 x 35 x 4400 mm BLACK	4	REN-400525-B	
13	MC4 Pre terminated cable 2m (Pack of 2)	1	MC4-2M-2	
14	MC4 Connector Twin Pack (Kit 1) 0014/0015	1	MC4-CONN14-2-PACK	
15	4mm2 single-core DC cable 25m - Black	1	CABLE4-1-25	
16	K&N Single Phase AC Switch Disconnecter 25A	1	KG20-T203-GBA294	
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	
19	SolarEdge Power Management package <100A grid supply	1	SE-PM-WND-1PH-100A	
Other Equipment				
20	Scaffolding, Packaging and Delivery			
Installation, Commission and Sign off				
21	Approximate Time: 2/3days for 2 people			
22	MCS Certification & DNO Notification			
			Total Net Cost	£7,029.52
			VAT @ 5%	£351.48
			Total Cost with VAT @5%	£7,380.99



Option 3 - Array Design & Production Summary

7.4kW JA Solar (20x370w) + Solis – South 5°

Estimated Production Level & Return

KWph PA	7178
Total Return 20 Yrs	£27,366.84
Av. Annual Return	£1,094.67
Annual R.O.I	13.95%
Year of payback	7
Cost (exc VAT)	£7,845.74
Cost (incl VAT)	£8,238.02

System Details

System Size (Kw)	7.4
Sq. M. of panel req.	38.07
Elevation	35°
Orientation	South 5°
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 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 as 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	*7.4kWp
Estimated Annual system output (Gd)	*7178kWh

Basic Payback Calculation

Proportion of electricity generated exported to grid (Ex) :	*50%
Standard import tariff at average unit price (It)	*£0.25
Proposed export tariff (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	$P_y = Cost / V_t$

Option 3 - 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:	6,000W
Weight:	12kg
Max DC Power:	9,000W
Max AC Power:	6,000W
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. (The monitoring is not included in the quote)



The Panels

JA Solar modules reduce cell series resistance and stress between cell interconnectors improves module reliability and module conversion efficiency.

Features;

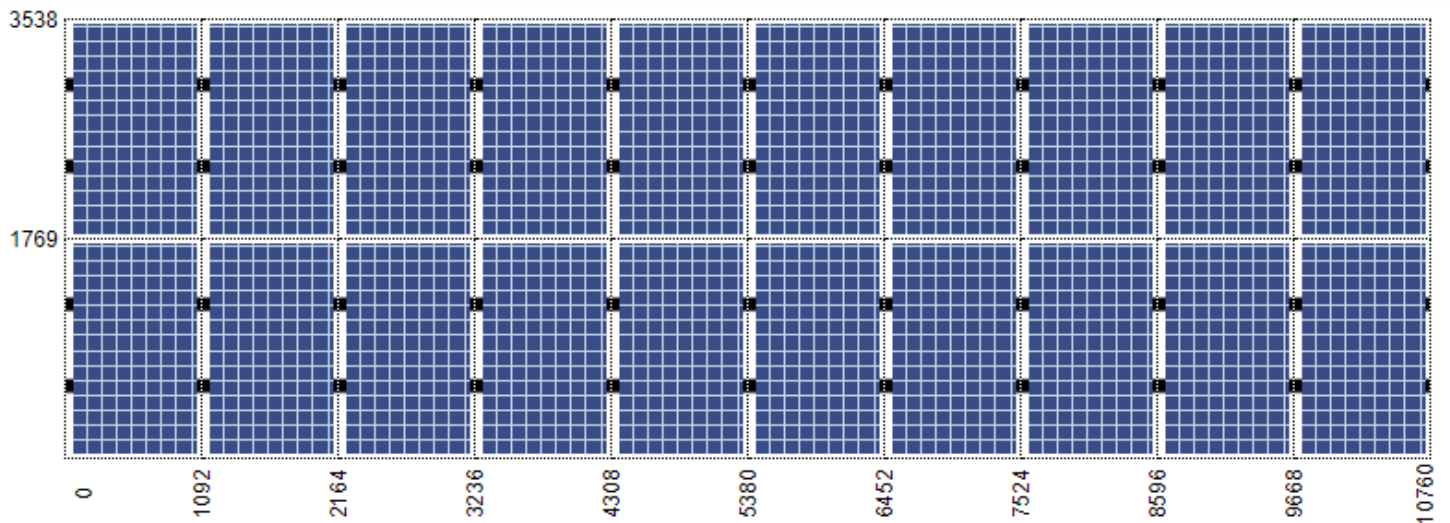
- High output power
- Less shading effect
- Lower temperature coefficient
- Better mechanical loading tolerance



Manufacturer:	JA Solar
Watts per panel:	370w
Cell Type:	Monocrystalline
Efficiency:	19%
Warranty:	12 yrs
Dimensions mm:	1689 x 996 x 35
Weight:	18.7kg

Option 3 - Equipment List

Item #	Description	Quantity	Part Number	
Solar & Electrical Equipment				
1	JA Solar 370W Mono MBB Percium Half-Cell All Black Short Frame	20	JAM60S-21-370-MR	
2	Solis 6kW S6 Dual MPPT - Single Phase with DC	1	SOL-6.0-S6-DT-DC	
3	Dektite Lead Multicable Solar Flashing (Tiled or Slate)	1	DNLS10MB	
4	End Clamp+ 30 - 50mm Black	8	REN-420081-B	
5	Middle Clamp+ 30 - 50mm Black	36	REN-420082-B	
6	Wood screw pan head 6 x 80 SIT30 Single (900318) (Pack of 21)	8	REN-900318-21	
7	Roof hook UK Flexible (without wood screw)	56	REN-420182	
8	VarioSole + End Cap 41x35 rail Single - Black	8	REN-900245-B	
9	VarioSole+ Rail connector for rail 41 x 35 mm	8	REN-400531	
10	VarioSole+ Mounting rail 41 x 35 x 3300 mm BLACK	10	REN-400524-B	
11	VarioSole+ Mounting rail 41 x 35 x 4400 mm BLACK	4	REN-400525-B	
12	MC4 Pre terminated cable 2m (Pack of 2)	1	MC4-2M-2	
13	MC4 Connector Twin Pack (Kit 1) 0014/0015	2	MC4-CONN14-2-PACK	
14	4mm2 single-core DC cable 50m - Black	1	CABLE4-1-50	
15	K&N Single Phase AC Switch Disconnecter 25A	1	KG20-T203-GBA294	
16	Emlite 1-ph generation meter 100A (1000 pulse/kWh) incl. Cover	1	EM-ECA2	
17	PV on Roof and Hazard Labels Pack	1	BOHAZARD-SET	
Other Equipment				
18	Scaffolding, Packaging and Delivery			
Installation, Commission and Sign off				
19	Approximate Time: 2/3days for 2/3 people			
20	MCS Certification & DNO Notification			
			Total Net Cost	£7,845.74
			VAT @ 5%	£392.29
			Total Cost with VAT @5%	£8,238.02



Option 4 - Array Design & Production Summary

7.4kW JA Solar (20x370w) + Solar Edge – South 5°

Estimated Production Level & Return

KWph PA	7178
Total Return 20 Yrs	£27,366.84
Av. Annual Return	£1,094.67
Annual R.O.I	11.50%
Year of payback	9
Cost (exc VAT)	£9,515.42
Cost (incl VAT)	£9,991.19

System Details

System Size (Kw)	7.4
Sq. M. of panel req.	38.07
Elevation	35°
Orientation	South 5°
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 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 as 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	*7.4kWp
Estimated Annual system output (Gd)	*7178kWh

Basic Payback Calculation

Proportion of electricity generated exported to grid (Ex) :	*50%
Standard import tariff at average unit price (It)	*£0.25
Proposed export tariff (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	$P_y = \text{Cost} / V_t$

Option 4 - Equipment Summary

The Inverter

The SolarEdge inverters combine a sophisticated, digital control technology and a one stage, efficient power conversion architecture to achieve superior solar power harvesting and best-in-class reliability. The fixed-voltage technology ensures the solar inverter is always working at its optimal input voltage, regardless of the number of modules in a string or environmental conditions.



Manufacturer:	Solar Edge
Rated Power:	6,000W
Weight:	10.6kg
Max DC Power:	12,000W
Max AC Power:	6,000W
Warranty:	12yrs

The Optimisers

SolarEdge power optimisers maximise energy from each panel through constant tracking of Maximum Power Point per panel. Optimal efficiency is achieved by automatically maintaining a fixed string voltage and performance can be monitored via the SolarEdge monitoring portal. Each power optimiser is equipped with the unique SafeDC feature which automatically shuts down module voltage whenever inverter or grid power are shut down.



The Monitoring

Monitoring is vital, especially when trying to promote green credentials but more importantly from a system verification point of view. The monitoring that we are suggesting would provide "live" real time feedback on how the system is operating, what it's producing, and whether it is operating correctly. Solar edge does this on a panel-by-panel basis making fault finding and shading obsolete. The system also allows you to view all the same data from your smartphone, tablet or laptop, meaning you can access your systems performance output from where ever you are in the world.

Solar edge Full system & Free 3rd party Monitoring Including "live" via Monitor, PC, Laptop, or smartphone using WiFi or CAT5e



The Panels

JA Solar modules reduce cell series resistance and stress between cell interconnectors improves module reliability and module conversion efficiency.

Features;

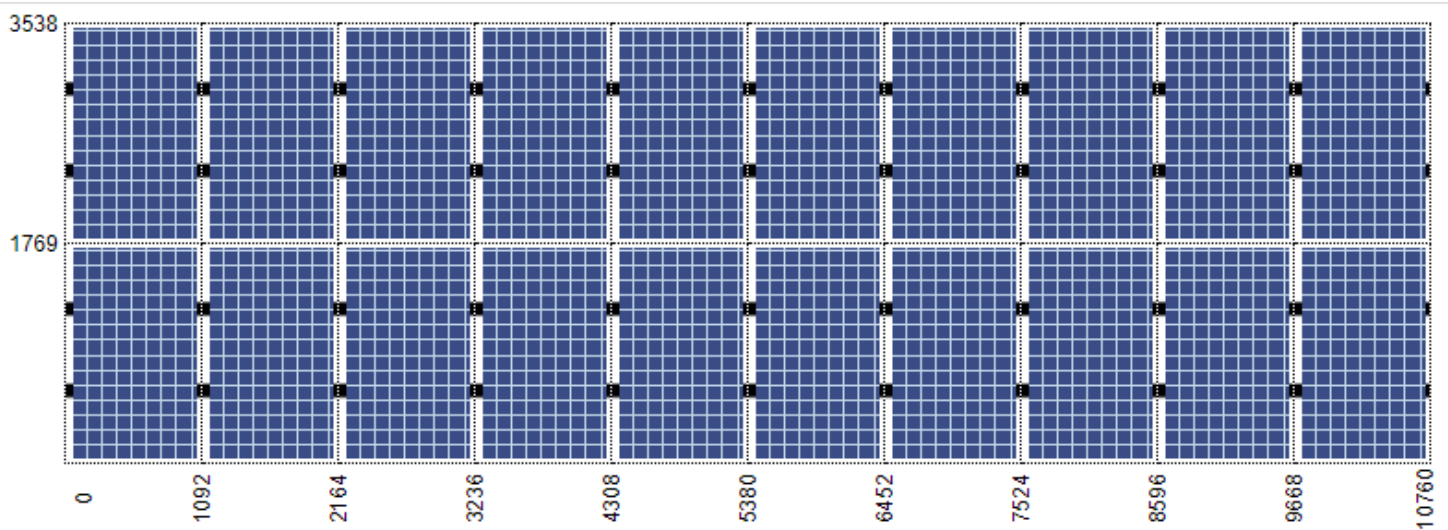
- High output power
- Less shading effect
- Lower temperature coefficient
- Better mechanical loading tolerance



Manufacturer:	JA Solar
Watts per panel:	370w
Cell Type:	Monocrystalline
Efficiency:	19%
Warranty:	12 yrs
Dimensions mm:	1689 x 996 x 35
Weight:	18.7kg

Option 4 - Equipment List

Item #	Description	Quantity	Part Number	
Solar & Electrical Equipment				
1	JA Solar 370W Mono MBB Percium Half-Cell All Black Short Frame	20	JAM60S-21-370-MR-AB-MC4	
2	Solar Edge S440 Power Optimizer	20	S440-MC4	
3	SolarEdge 3680W Single Phase HD Wave Inverter NO DISPLAY	1	SE-3680H-APP	
4	Dektite Lead Multicable Solar Flashing (Tiled or Slate)	1	DNLS10MB	
5	End Clamp+ 30 - 50mm Black	8	REN-420081-B	
6	Middle Clamp+ 30 - 50mm Black	36	REN-420082-B	
7	Wood screw slated tiles countersunk 6 x 80 (Pack of 21)	8	REN-900013-21	
8	Roof hook UK Flexible (without wood screw)	56	REN-420182	
9	VarioSole + End Cap 41x35 rail Single - Black	8	REN-900245-B	
10	VarioSole+ Rail connector for rail 41 x 35 mm	8	REN-400531	
11	VarioSole+ Mounting rail 41 x 35 x 3300 mm BLACK	6	REN-400524-B	
12	VarioSole+ Mounting rail 41 x 35 x 4400 mm BLACK	4	REN-400525-B	
13	MC4 Pre terminated cable 2m (Pack of 2)	1	MC4-2M-2	
14	MC4 Connector Twin Pack (Kit 1) 0014/0015	1	MC4-CONN14-2-PACK	
15	4mm2 single-core DC cable 25m - Black	1	CABLE4-1-25	
16	K&N Single Phase AC Switch Disconnecter 25A	1	KG20-T203-GBA294	
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	
19	SolarEdge Power Management package <100A grid supply	1	SE-PM-WND-1PH-100A	
Other Equipment				
20	Scaffolding, Packaging and Delivery			
Installation, Commission and Sign off				
21	Approximate Time: 2/3days for 2 people			
22	MCS Certification & DNO Notification			
			Solar PV Total Net Cost	£9,515.42
			VAT @ 5%	£475.77
			Total Cost with VAT @5%	£9,991.19



Optional Upgrades

Options 2 & 4 could be upgraded to include an EV charger.

This would add approximately £750 plus VAT to the quote.

The Inverter

The SolarEdge inverters combine a sophisticated, digital control technology and a one stage, efficient power conversion architecture to achieve superior solar power harvesting and best-in-class reliability. The fixed-voltage technology ensures the solar inverter is always working at its optimal input voltage, regardless of the number of modules in a string or environmental conditions. In addition to the reduced hassle of installing a standalone EV charger and a PV inverter separately, homeowners can track their charging status, control vehicle charging, and set charging schedules using the fully integrated SolarEdge monitoring platform.



Manufacturer:	Solar Edge
Rated Power:	5,000W
Weight:	9kg
Max DC Power:	7,750W
Max AC Power:	5,000W
Warranty:	5yrs

Immersion Diverter

The Award Winning SOLiC 200 from Earthwise Products automatically converts energy generated by existing PV panels into hot water by diverting excess solar power to the immersion heater before it's exported to the national grid. Simple to use and maintenance free, the SOLiC 200 is self-contained, easy to install and can save the homeowner hundreds of pounds over the course of a year. The SOLiC 200 includes a 10-year return to base guarantee* has been built to last 25 years, and has been designed, constructed, and fully tested in Britain to the highest CE standards.



This could be installed for an additional £300 plus VAT

Battery Storage

Tesla POWERWALL 2

Power your home and electric vehicle with renewable energy you control and reduce your reliance on the grid. Monitor what energy you produce and control your self-powered system with 24/7 access using the Tesla app.

The Tesla Powerwall is a more premium and expensive product, but are actually the cheapest battery choice when it comes to pounds per watt as they are very large (capacity wise, very neat and slimline physically) and they are currently the only battery that allows you to go off-grid (or island) and continue to function even when there is a power cut, or the grid fails.



Supply and Install Powerwall 2 With Back up Gateway	
1 x Tesla Powerwall2 AC 13.5KWh Battery with Tesla built-in battery Inverter for AC Coupling G98/G99 & G100 Export	£6,083.33
1 x Tesla Gateway 2 With Backup and any additional supporting hardware and electrical components.	£1,166.67
Labour	£1,440.00
CT clamps & associated electrical sundries	£63.67
Delivery	£50.00
DNO Application, Certification etc	£60.00
Sub Total	£8,863.67
VAT @20%	£1,772.73
Total	£10,636.40

Solar Edge Energy Bank 10kwh Battery

SolarEdge Energy Bank 10kWh Battery. Optimized for SolarEdge StorEdge with HD-Wave technology inverters. Integrates with the complete SolarEdge residential offering, providing a single point of contact for warranty, support, training, monitoring and simplified logistics.

- NMC 9.7kWh / 5kW Li-ion technology
- DC coupling
- Support up to 3 batteries per inverter for more power and capacity 100% depth of discharge
- Superior system efficiency (PV > Battery > Grid)
- Simple installation with plug & play:
- Floor mounting or wall mounting
- Automatic configuration with pre-defined settings
- All SolarEdge solutions are managed by a single APP to optimize production, consumption and stored energy.



solar **EDGE**

Supply and Install SolarEdge 10kw Battery	
SolarEdge Energy Bank 10kWh Battery	£5,040.00
Labour	£960.00
CT clamps & associated electrical sundries	£63.67
Delivery	£50.00
DNO Application, Certification etc	£60.00
Sub Total	£6,173.67

LG Chem

LG Chem RESU batteries have exceptionally high energy density, which makes them a perfect choice for domestic settings where space is at a premium. It is designed to be wall-mounted and, because of its IP55 rating, can be installed in temperate outdoor locations if shielded from direct sunlight and rain.

Maximum Charge / Discharge power of the battery is 5kW (LG Chem recommends 3kW for maximum battery life). Peak DISCHARGE power is 7kW (for 10 seconds maximum) only possible with certain charger inverters.



Supply and Install LG Chem 10kw Battery	
LG Chem 10kWh HV Li Battery - S/Edge RS485 (400V BMS)	£4,304.00
Labour	£960.00
CT clamps & associated electrical sundries	£63.67
Delivery	£50.00
DNO Application, Certification etc	£60.00
Sub Total	£5,437.67
VAT @20%	£1,087.53
Total	£6,525.20

Once you have confirmed the system with us, before ordering the system we will return and make an exact measurement of the roof, to make sure the system will fit without contravening Building Regulations and or snow loading or wind shear factor calculations.

A structural review can be provided from an independent company to ensure that the roof is sufficient to support the system that is specified. We will supply wind loading and snow loading calculations before work commences on the roof.

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

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. As we have already discussed, I 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

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. 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.

