

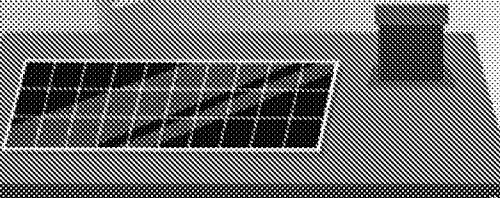
Prepared by: Holly Trinder

For: David Scott  
47A King Street, Arundel

Quote #: 3895238

Valid until: 4th March 2024

## SOLAR & BATTERY installation by octopus energy



I confirm that we would like to proceed with a solar installation at the address listed above and that:

We are the legal and registered owner/occupier of the property.

I can confirm that we have appointed Octopus Energy Services to install Solar PV on our land, and hereby grant permission for them or any consultant that they may authorise to pre-screen my existing connection, and seek and apply for new grid connections on our land, for the purpose of installing Solar PV to the local electricity distribution network.

Name:

Signature:

Date:

10434397 - Octopus Energy Services

Uk House, 5th Floor, 164-182 Oxford Street  
London None W1D 1NN

Scan QR code on your phone to  
access the online proposal.



## Express Request for Work to Commence during Cancellation Period

Under the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013, you have the statutory right to cancel your order, beginning when you sign the contract and ending 14 days after all the goods relating to the contract are delivered to your home.

If you wish for us to start the installation of your goods during the 14-day cancellation period after delivery, we need your express request for us to do so. This will enable us to complete your installation on the earliest available date after the goods have been delivered.

Please note that if you consent for work to begin within the cancellation period and you later exercise your right to cancel, you will be liable for the cost of work performed up to the point of cancellation. You will also lose the right to cancel the contract within the cancellation period when the installation is finished, and we may charge you for the reasonable fees for the work undertaken and the reduced value of the goods.

Please choose one of the following options to confirm your preference:

If you wish for us to start the installation of your goods during the 14-day cancellation period after delivery, please tick this box to provide an express request for us to do so.

If you do not wish for us to start the installation of your goods during the 14-day cancellation period after delivery, please tick this box.

## Recommended System Option

£9,144

Purchase Price

£36,030

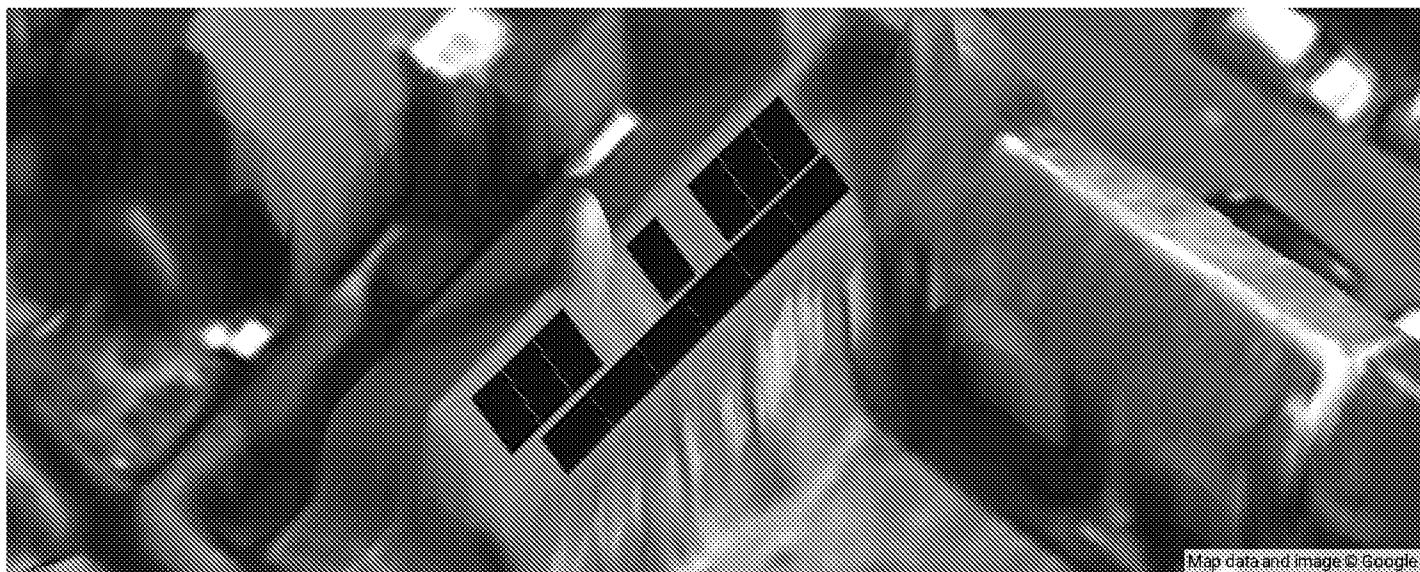
Lifetime Electricity Bill  
Savings

£26,886

Estimated net savings  
over system lifetime

5.655 kW

System Size



Map data and image © Google

## Your Solution

### JAM54D41 LB

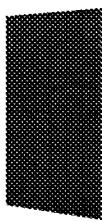
5.655kW of Solar Power

13 x JAM54D41-435/LB

435 Watt panels

25 Year Product Warranty & 30 Year Linear  
Performance Warranty

6,186kWh per year



JA SOLAR

### 30m Solar Panel Bird Exclusion Kit

30m Solar Panel Bird Exclusion Kit

1 x Enviroguard

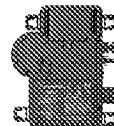
### Enphase IQ8AC Microinverter (0.36 kW AC)

4.68 kW of Inverter Power

Enphase Energy Inc.

13 x IQ8AC-72-M-INT

25 Year Warranty Parts & Labour



ENPHASE

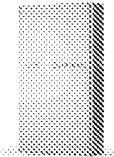
### Enphase IQ Battery 5P (5.0 kWh, 3.2 kW AC)

5.0 kWh of Usable Capacity

Enphase Energy Inc.

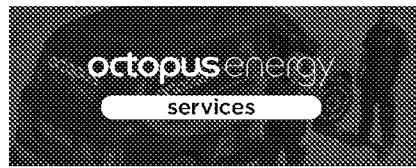
1 x IQBATTERY-5P-1P-INT 5kWh

15 Year Warranty



ENPHASE

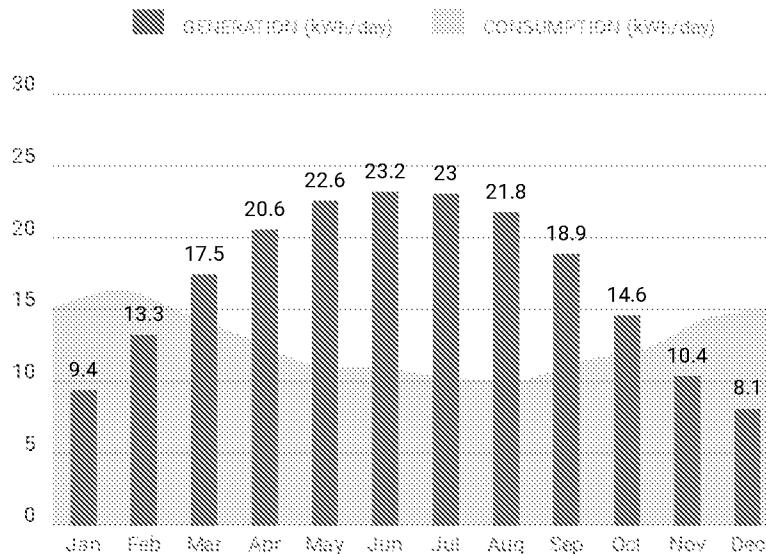
Warranties: JA SOLAR - 25 Year Panel Product Warranty & 30 Year Panel Performance Warranty ENPHASE - 25 Year Inverter Product Warranty & 15 Year Battery Product Warranty TESLA - 10 Year Inverter and Battery Product Warranty



We aim to provide proposals based on systems inclusive and exclusive of battery storage, whilst we can advise on the cost and estimated savings and ultimately the decision on the type of system you choose for your home site will be the consumer.

## System Performance

**132%**  
Energy From Solar



**60%**  
Self-consumption

**40%**  
Export to grid

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. The solar PV self-consumption has been calculated in accordance with the most relevant methodology for your system. There are a number of external factors that can have a significant effect on the amount of energy that will be self-consumed.

Shading will be present on your system that will reduce its output by the factor stated. This factor was NOT calculated using the MCS shading methodology but we can confirm that the system as quoted, taking into account the shading present, will deliver at least 90% of the energy (in kWh) as set out in this performance estimate.

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.

**Important Note:** The energy performance and benefits of BESS is impossible to predict with certainty due to the numerous functions a system can be programmed to perform. 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.

[BESS capacity not used for self-consumption] Storage capacity of the battery - assumed usable capacity of battery [Total energy discharged per annum] Assumed usable capacity of battery x 75% [Additional self-consumption] Estimated annual output (Section B) x self-consumption rate with battery as a % (no higher than 95%) - Exempted solar PV self-consumption (with BESS) (Section C)

### A. Installation data

Installed capacity of PV system - kWp (stc)	5.655	kWp
Orientation of the PV system - degrees from South	Group 1: 13 panels with Orientation: 10 °	°
Inclination of system - degrees from horizontal	Group 1: 13 panels with Tilt: 43°	°
Postcode region	2	

### B. Performance calculations

kWh/kWp (Kk) from table	Group 1: 1126	kWh/kWp
Shade Factor (SF)	0.971	
Estimated annual output (kWp x Kk x SF)	6,186	kWh
<b>C. Estimated PV self-consumption - PV Only</b>		
Assumed occupancy archetype	In Half Day	
Assumed annual electricity consumption, kWh	4,700.00	kWh
Assumed annual electricity generation from solar PV system, kWh	6,186	kWh
Expected solar PV self-consumption (PV Only)	1,880.26	kWh
Grid electricity independence / Self-sufficiency (PV Only)	40.01	%
<b>D. Estimated PV self-consumption - with EESS</b>		
Assumed usable capacity of electricity energy storage device, which is used for self-consumption, kWh	5.00	kWh
Expected solar PV self-consumption (with EESS)	3,735.26	kWh
Grid electricity independence / Self-sufficiency (with EESS)	79.0%	%
<b>E. Additional benefits from PV and EESS</b>		
EESS capacity not used for self-consumption	0.00	kWh
Total energy discharged per annum	3650.00	kWh
Additional self-consumption for EV, heat pumps, diverters (only when present)	0.00	kWh

**Important Note:** If you choose a system with a battery, also known as an Electrical Energy Storage System (EESS), the energy performance and benefits of an EESS is impossible to predict with certainty due to numerous functions a system can be programmed to perform. 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. To read more about the MCS battery standard here is a link to [The Battery Standard document](#).

**Energy from solar** - refers to the total annual estimated output of your system vs. your current annual energy consumption.

**Self-consumption** - this refers to how much of your energy generation from your solar PV system you are predicted to consume.

**Export to grid** - this refers to how much of your energy generation from your solar PV system you are predicted to export back to the grid.

## Environmental Benefits

Solar has no emissions. It just silently generates pure, clean energy.



Each Year	Over System Lifetime
132% Of CO <sub>2</sub> , SO <sub>x</sub> & NO <sub>x</sub>	2 tons Avoided CO <sub>2</sub> per year
	46,825 Car km avoided

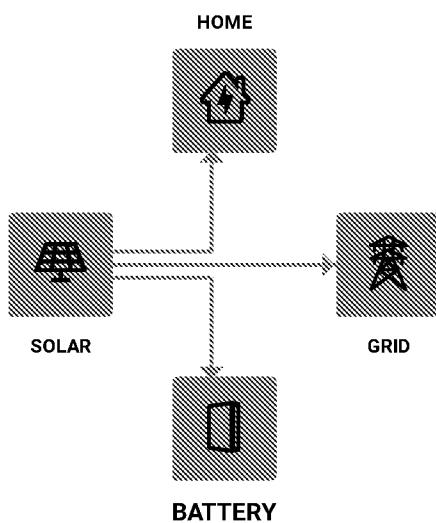
  

301 Trees planted	34 Long haul flights avoided
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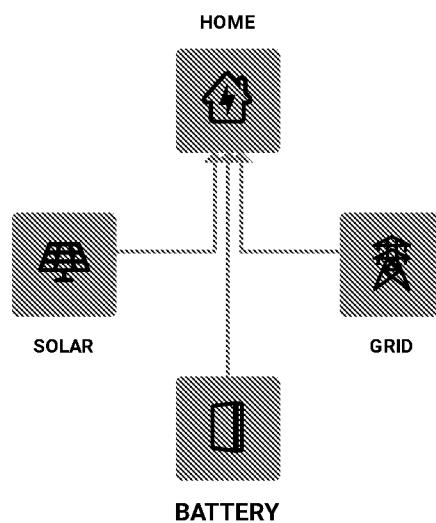
\*Please see the TSC's for details on how environmental benefits calculated

## How your system works

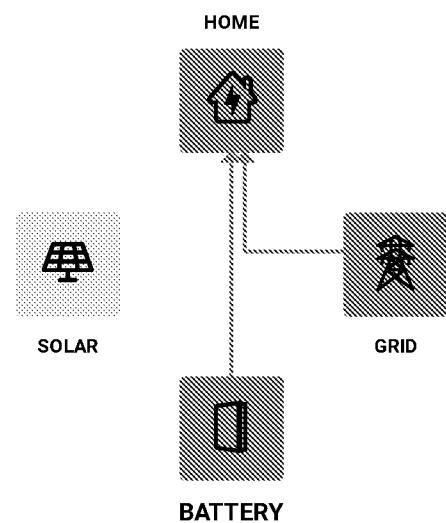
### Generating Excess Solar



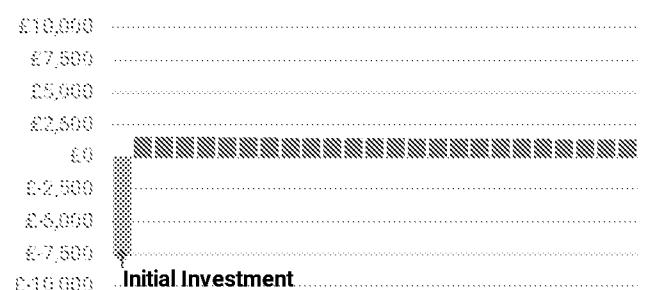
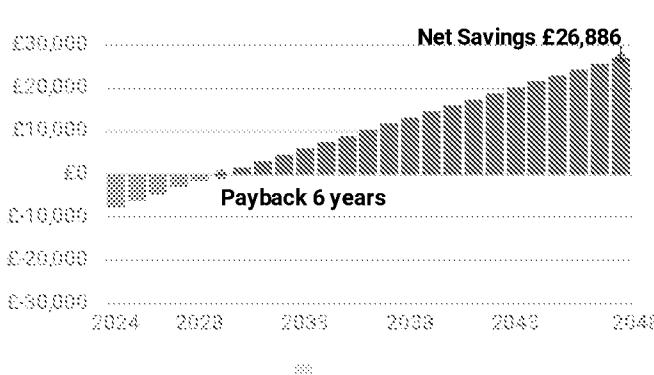
### Partially Offset Usage



### Night



## Net Financial Impact Pay Up Front



£8,381

7 Years  
11 Months

294%

16.0%

### Net Present Value

## Discounted Payback Period

## Total Return on Investment

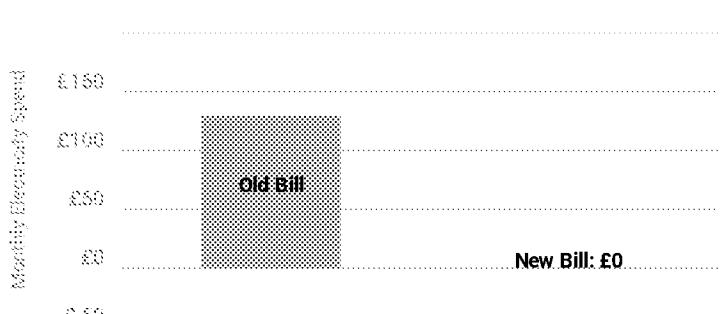
## Rate of Return on Investment

Year	Electricity Consumption (kWh)	Solar Generation (kWh)	Utility Bill (before solar) (£)	Utility Bill (after solar) (£)	Annual Savings (from solar) (£)	System Costs (Net of Dealer Incentives) (£)	Customer Incentives (Upfront) (£)	Net Savings (£)	Cumulative Impacts (£)
2024	4,700	6,136	1,548	0	1,548	9,144	0	(7595)	(7595)
2025	4,700	6,161	1,548	6	1,542	0	0	1541	(6053)
2026	4,700	6,136	1,548	13	1,535	0	0	1534	(4519)
2027	4,700	6,111	1,548	20	1,528	0	0	1527	(2991)
2028	4,700	6,087	1,548	27	1,521	0	0	1521	(1470)
2029	4,700	6,062	1,548	33	1,515	0	0	1514	44
2030	4,700	6,037	1,548	40	1,508	0	0	1508	1552
2031	4,700	6,012	1,548	47	1,502	0	0	1501	3054
2032	4,700	5,988	1,548	99	1,449	0	0	1448	4502
2033	4,700	5,963	1,548	104	1,444	0	0	1443	5946
2034	4,700	5,938	1,548	109	1,439	0	0	1438	7385
2035	4,700	5,914	1,548	114	1,434	0	0	1433	8819
2036	4,700	5,889	1,548	120	1,428	0	0	1428	10247
2037	4,700	5,864	1,548	125	1,423	0	0	1422	11670

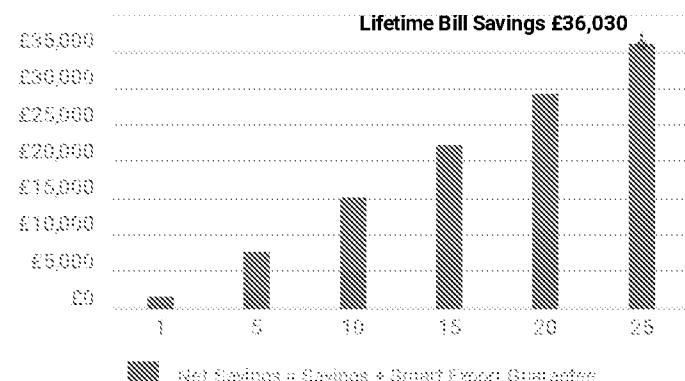
Year	Electricity Consumption (kWh)	Solar Generation (kWh)	Utility Bill (before solar) (£)	Utility Bill (after solar) (£)	Annual Savings (from solar) (£)	System Costs (Net of Dealer Incentives) (£)	Customer Incentives (Upfront) (£)	Net Savings (£)	Cumulative Impacts (£)
2038	4,700	5,839	1,548	131	1,417	0	0	1417	13087
2039	4,700	5,815	1,548	136	1,412	0	0	1411	14499
2040	4,700	5,790	1,548	142	1,406	0	0	1406	15905
2041	4,700	5,765	1,548	147	1,401	0	0	1400	17306
2042	4,700	5,740	1,548	153	1,395	0	0	1395	18701
2043	4,700	5,716	1,548	158	1,390	0	0	1389	20091
2044	4,700	5,691	1,548	159	1,389	0	0	1389	21480
2045	4,700	5,666	1,548	184	1,364	0	0	1364	22844
2046	4,700	5,641	1,548	195	1,353	0	0	1353	24197
2047	4,700	5,617	1,548	201	1,347	0	0	1347	25545
2048	4,700	5,592	1,548	207	1,341	0	0	1340	26886

## Electricity Bill Savings

### First Year Monthly Bill Savings



### Cumulative Bill Savings



Month	Solar Generation (kWh)	Electricity Consumption before solar (kWh)	Electricity Imported after solar (kWh)	Electricity Exported after solar (kWh)	Export Credit (£)	Utility Bill before solar (£)	Utility Bill after solar (£)	Estimated Savings (£)
Jan	291	469	202	8	1	152	68	83
Feb	371	458	172	70	13	147	47	100
Mar	541	455	126	195	38	148	10	138
Apr	617	388	68	281	55	123	-24	152
May	700	345	18	356	71	116	-51	167
Jun	696	328	8	360	72	110	-55	166
Jul	714	317	0	381	76	108	-61	169
Aug	674	311	7	354	70	106	-54	160
Sep	566	342	50	260	50	115	-24	138
Oct	453	382	98	154	29	126	12	115
Nov	311	435	170	30	6	141	55	87
Dec	251	469	230	0	0	152	78	73

Utility savings based on switch from Flexible Octopus October 2022 v1 to Octopus Flux July 2023

Estimates do not include replacement costs of equipment not covered by a warranty. Components may need replacement after their warranty period. Financial discount rate assumed: 6.75%.

Your projected energy cost is calculated by considering a 3.0% increase in energy cost each year, due to trends in the rising cost of energy. This estimate is based on your selected preferences, current energy costs and the position and orientation of your roof to calculate the efficiency of the system. Projections are based on estimated usage of 4700 kWh per year, assuming Flexible Octopus October 2022 v1 Electricity Tariff. Please be aware this is for the purposes of providing a demonstration of costs versus usage over time but is not an accurate representation of actual electricity costs over the period and those costs may increase or decrease.

### Proposed Tariff Details - octopusfluxtemplate

#### Energy Charges

Day	£0.29 / kWh
5am-4pm & 7pm-2am	



<b>Flux</b> 2am-5am	£0.18 / kWh
<b>Peak</b> 4pm-7pm	£0.41 / kWh
<b>Smart Export Guarantee</b>	
<b>Day</b> 5am-4pm & 7pm-2am	£0.18 / kWh
<b>Flux</b> 2am-5am	£0.07 / kWh
<b>Peak</b> 4pm-7pm	£0.30 / kWh
<b>Fixed Charges</b>	
<b>Standing charge</b>	£0.48 / day

Your electricity tariff rates may change as a result of installing the system. You should contact your electricity retailer for further information. If you have not specified the smart export guarantee (SEG) you are planning to sign up to following your solar PV installation we will use tariffs and an export rate as offered by [Octopus Energy](#). You do not need to be an Octopus Energy Customer to sign up to the SEG - given that you have a smart meter installed in your home and a MCS accredited solar PV install you can apply to join Octopus Energy's SEG [here](#). For any other export tariffs offered by Octopus you will need to be an Octopus Energy Customer to be eligible, read more about these [here](#).

## Quotation

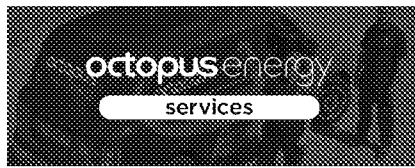
### Payment Option: Pay Up Front

13 x JA Solar 435 Watt Panels (JAM54D41-435/LB)	
13 x IQ8AC-72-M-INT (Enphase Energy Inc.)	
1 x IQBATTERY-5P-1P-INT 5kWh (Enphase Energy Inc.)	
1 x Enviroguard	
Total system price	
ENPHASE 5kWh battery	
June discount	
Total system price	
<b>Purchase Price</b>	

This proposal is valid until 31st March 2024

### Payment Milestones

Acceptance	
After Installation	
<b>Total</b>	

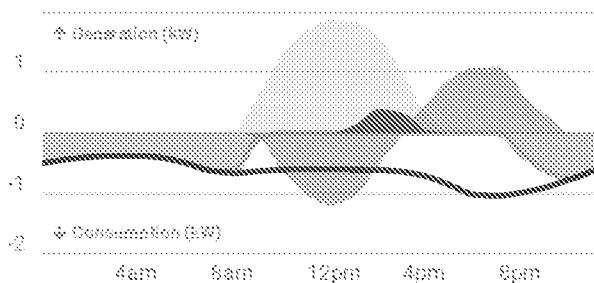


*Octopus Energy have financing available for solar installation through the lender, Zopa Embedded Finance Limited, trading as "DivideBuy", which is an appointed representative of Zopa Bank Limited, authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. In this instance, Octopus acts as the credit broker and not the lender. Please see DivideBuy's FAQs (<https://dividebuy.co.uk/faqs/>) for further information on finance.*

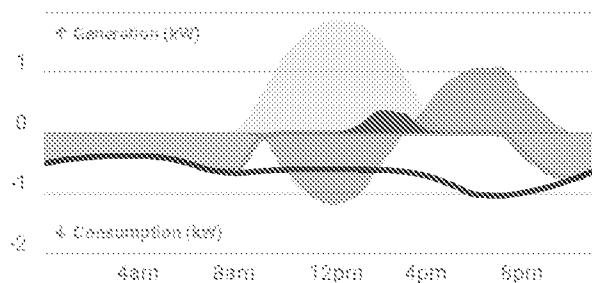
## Daily Energy Flows

CONSUMPTION (kWh) GENERATION (kWh) BATTERY (kWh) NET CONSUMPTION (kWh) EXPORT TO GRID (kWh)

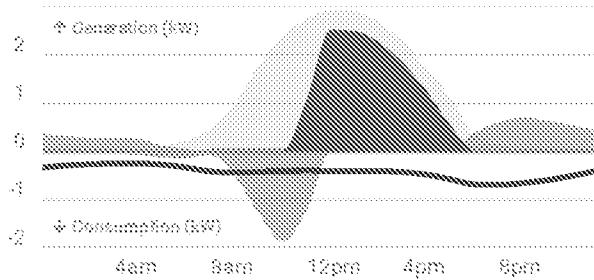
Winter Weekday



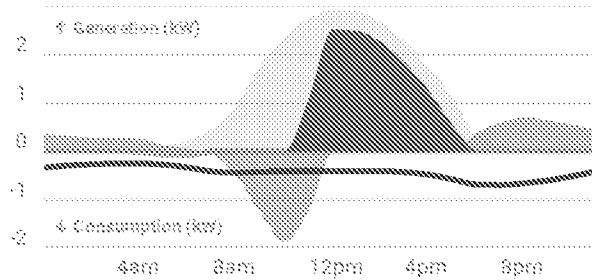
Winter Weekend



Summer Weekday

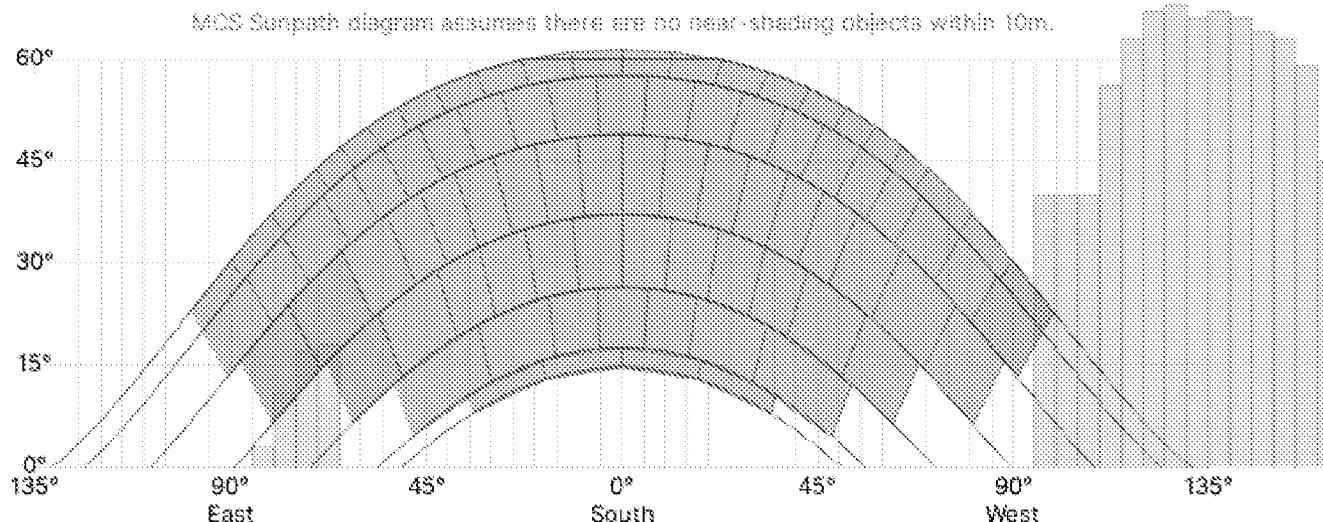


Summer Weekend



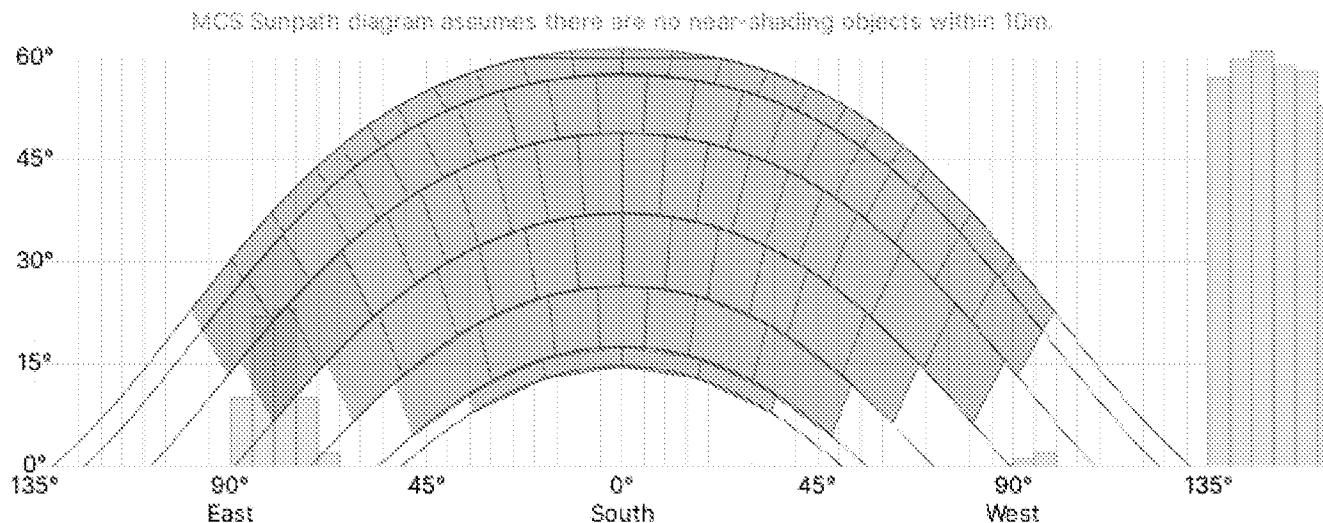
## Sunpath Diagram

**Disclaimer:** The shade mask mapped onto the sunpath diagram is based off the field of view from a point in the center of the array. This means that the shade mask shown will only capture the shading experienced at the array center point, and will not reflect the shading casted onto other locations on the array.



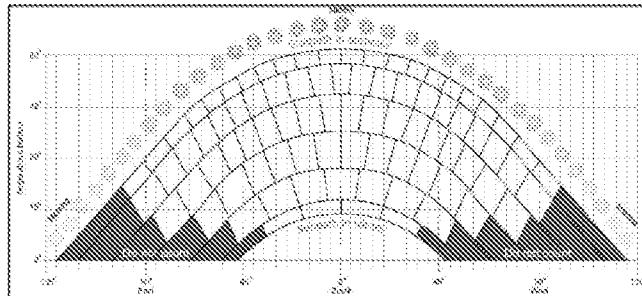
## Sunpath Diagram

**Disclaimer:** The shade mask mapped onto the sunpath diagram is based off the field of view from a point in the center of the array. This means that the shade mask shown will only capture the shading experienced at the array center point, and will not reflect the shading casted onto other locations on the array.



## Solar PV design shading considerations

Shading can have a detrimental effect on the performance of a solar PV system. Shading should be avoided where possible. At a minimum a system should be free from shading from 10am until 2pm from March to October as these are typically the highest output periods for a south facing solar PV system. If there are objects that shade your roof an estimation of the losses will have been made in this design. Our design team use both an online shading calculator and as specified by MCS our surveyors complete a shading analysis and draw a sun path diagram to estimate the shading factor for your system, however it is impossible to predict these with certainty. For more information on shade analysis and how its calculated see the [MCS Shade Evaluation Procedure](#).



This proposal has been prepared by Octopus Energy Services using tools from OpenSolar. Please visit [www.opensolar.com/proposal-disclaimer](http://www.opensolar.com/proposal-disclaimer) for additional disclosures from OpenSolar.

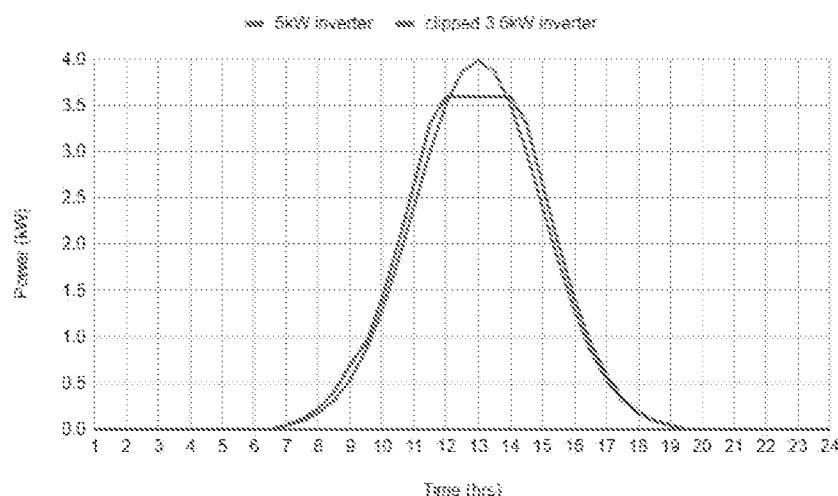
Read about clipping here!

## Clipping

Where possible it is considered best practice to oversize the array of a solar PV system compared to the size of the inverter. The average output of your solar PV array for most of the year will be below its nominal rated power output due to the weather and solar radiation conditions in the UK. Inverters work best at or close to their maximum rated output power. In oversizing a solar PV array compared with your inverter you are increasing the amount of time that the inverter is close or at its rated output.

Note however, oversizing a solar array can lead to clipping. This is where on the sunniest days of the year the inverter will clip generation at its maximum output power and some generation on those days will be lost. The losses on these sunny days (where you are likely generating an excess amount of energy that you cannot consume) are made up by the overall better performance and price point of the system throughout the year. Here is an example generation curve of a 5kW inverter with no clipping and a 3.6kW inverter on the same system clipping.

If you have any questions about clipping reach out to your solar advisor.



## GENERAL TERMS AND CONDITIONS OF SALE AND INSTALLATION OF LOW CARBON PRODUCTS

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## 1. DEFINITIONS

1.1 In these general terms and conditions, the following terms shall have the following meaning, unless explicitly stated otherwise.

**Additional Works Quote:** has the meaning given to it in the Product Terms.

**Customer:** the individual named as the customer on the Estimated Quote.

**Due Date:** the date falling 5 days after the date of installation of the Goods

**Estimated Quote:** has the meaning given to it, and as further detailed, in the Product Terms

**Goods:** the goods set out in your Estimated Quote, including the installation of the same

**Contract Terms:** these general terms and conditions of sale and installation of low carbon products

**Octopus:** Octopus Energy Services Limited as further described in Clause 3.1 below

**Online Customer Journey:** means the online process undertaken to offer to purchase Goods via the specific Good's webpage.

**Product Terms:** the specific terms and conditions that applies to those Goods, in addition to these general terms and conditions

**Sales Contract:** the legally binding contract agreed between Octopus and the Customer for the sale and installation of the Goods following finalisation of the works and costs required in accordance with the Contract Terms, the Product Terms your Estimated Quote, and any Additional Works Quote (if applicable).

**Standard Installation** an installation requiring only minor modifications to your home's interior and exterior finished surfaces and adjacent grounds.

1.2 Any reference to 'we', 'us' or 'our' in these terms is to Octopus, and any reference to 'you' or 'your' is to the Customer.

1.3 When we use the words "writing" or "written" in these terms, this includes emails.

## 2. OUR TERMS AND CONDITIONS

2.1 **What these terms cover.** These are the general terms and conditions on which we supply Goods to you. Additional product specific terms and conditions may also apply to the Goods. Where this is the case, we will provide you with the relevant Product Terms as part of your Sales Contract. To the extent there is any conflict between these Contract Terms and any Product Terms, these Contract Terms shall prevail.

**2.2** For the purposes of these terms, you are a 'consumer' if you are buying Goods from us as an individual for purposes wholly or mainly outside of your trade, business, craft or profession. As a consumer, you have legal rights in relation to Goods that are faulty or which are not provided as described. Advice about your legal rights is available from your local Citizen's Advice Bureau. Nothing in your these Contract Terms or your Sales Contract more broadly will affect these legal rights.

### **3. INFORMATION ABOUT US AND HOW TO CONTACT US**

**3.1** We, Octopus Energy Services Limited, are a company registered in England and Wales. Our company registration number is 10434397 and our registered office is UK House, 5th Floor, 164-182 Oxford Street, London, United Kingdom, W1D 1NN. Our registered VAT number is 358672751.

**3.2** **How to contact us.** You can contact us by telephoning our customer service team at the number, or by writing to us at the email address, set out in the Product Terms for your Goods, or write to us at Octopus Energy Services Limited, UK House, 5th floor, 164-182 Oxford Street, London, W1D 1NN.

**3.3** **How we may contact you.** If we have to contact you, we will do so by telephone or by writing to you at the email address or postal address you provide to us as part of the Online Customer Journey.

### **4. OUR CONTRACT WITH YOU**

**4.1** Please see the Product Terms for your respective Goods for details of the Online Customer Journey and how the Sales Contract process is managed.

### **5. OUR GOODS**

**Goods can vary slightly from their pictures.** The true colour of any Goods may not exactly match that shown on your device or in our marketing or the packaging may be slightly different. The images of Goods on our website or marketing materials are for illustrative purposes only. Although we have made every effort to display the colours accurately, we cannot guarantee that a device's display of the colours will completely accurately reflect the colour of the Goods.

### **6. OUR RIGHT TO MAKE CHANGES TO GOODS PURCHASED**

**6.1** We may need to make changes to the Goods you've purchased following the signing of the Sales Contract. If this is required, we will notify you and explain the reason why, and if you are not comfortable with the changes you can contact our customer service team on 0808 196 6842 to end the Sales Contract before the change takes effect and receive a refund for any Goods you have paid for in advance, but not received.

## 7. PROVIDING THE GOODS

7.1 The costs of supply, delivery and installation of the Goods will be as set out in the Sales Contract.

7.2 **When we will provide the Goods.** We will arrange a mutually convenient date for delivery and/or installation prior to any delivery and/or installation taking place. If you provided us with express consent to install during your statutory 14-day cancellation period, we will do our best to install the Goods either upon delivery of the last component of the Goods (the **Delivery Date**) or within 7 days of the Delivery Date.

7.3 We may need certain information from you so that we can deliver and install the Goods, for example, instructions regarding access. We will contact you to ask for this information if needed. If you do not give us this information within a reasonable time of us asking for it, or if you give us incomplete or incorrect information, we may either end the Sales Contract (and Clause 11.1.2 will apply) or postpone or re-schedule delivery and/or installation of the Goods. We will not be responsible for supplying the Goods late or not supplying any part of them if this is caused by you not giving us the information we need within a reasonable time of us asking for it.

7.4 **What happens if there is a delay.**

- 7.4.1 If our supply of the Goods is delayed then we will contact you as soon as possible to let you know and we will take steps to minimise the effect of the delay. If there is a risk of substantial delay or if we confirm we are unable to deliver the Goods to you, you may contact us to end the Sales Contract and receive a refund for any Goods you have paid for but not received. Nothing in this Clause 7.4 affects your statutory rights and you retain the right to cancel the Sales Contract as set out in Clause 9.
- 7.4.2 If no one is available at your address to meet the Octopus engineer when they arrive to install the Goods, we will get in touch to inform you of how to rearrange the Octopus technician's visit.
- 7.4.3 If you do not allow us to access to your property to install the Goods as arranged (and you do not have a good reason for this) we may postpone and/or re-schedule installation. If, despite our reasonable efforts, we are unable to contact you or re-arrange access to your property, we may end the Sales Contract and Clause 11 will apply.
- 7.4.4 You have legal rights if we deliver any Goods late. Subject to clause 7.4.6, If we miss the delivery deadline for any Goods then you may treat the Sales Contract as at an end straight away if we confirm that we will not be able to deliver the Goods to you.
- 7.4.5 You may reschedule your delivery date, but you must give us at least 24 hours' notice (and such notice must be provided on a

working day) if you want to do this, or we may, at our discretion, charge you a fee of up to £150 as an administrative service fee. To reschedule your appointment or cancel your Sales Contract pursuant to the terms set out above please call us on 0808 196 6842 or email us at the address set out in the Product Terms for your Good.

7.4.6 We may reschedule your delivery date at our reasonable discretion, which will affect your wait time. Where we change your date, the periods and right of cancellation in clause 9 will remain in force.

## 7.5 **Responsibility for the Goods.**

7.5.1 Goods will become your responsibility from the time that we deliver the Goods at the address you provided to us.

7.5.2 You will own the Goods once we have received payment in full.

7.5.3 Where applicable for your Goods we will provide you with handover documentation once installation of the Goods has been completed.

## 8. **YOUR OBLIGATIONS UNDER THE SALES CONTRACT**

8.1 You agree to:

8.1.1 promptly provide us with any information we request and comply with our reasonable requirements;

8.1.2 make all necessary preparations to your property for your installation as set forth in your Sales Contract;

8.1.3 provide us with safe, free and unobstructed access to your property to carry out the installation; and

8.1.4 comply with all applicable laws, planning authority instructions, and obtain all necessary consents which we require for us to install the Good; and

8.1.5 comply with any additional Customer obligations set out in the Product Terms.

8.2 If you fail to cooperate with us or meet these obligations, we may cancel or delay your installation and charge you a cancellation fee which will only cover our reasonable costs incurred in these circumstances and which shall not exceed £150.

## 9. **YOUR RIGHTS TO END THE SALES CONTRACT**

9.1 **You end your Sales Contract with us in certain circumstances.** Your rights when you end the Sales Contract will depend on what you have bought, whether there is anything wrong with it, how we are performing and

when you decide to end the Sales Contract. You can end the Sales Contract for the following reasons:

- 9.1.1 if what you have bought is faulty or misdescribed you may have a legal right to end the Sales Contract (or to get the Goods repaired or replaced or to get some or all of your money back) – see Clause 12;
- 9.1.2 if you want to end the Sales Contract because of something we have done in breach of these terms, as set out in Clause 9.2 or
- 9.1.3 if you have just changed your mind about the Goods per Clause 9.3, you may be able to get a refund if you provide us with notice at any time from placing your order online until the end of the cooling off period, but this will be subject to deductions and you will have to pay our reasonable costs incurred, including the costs of any uninstallation, collection and destruction if required, together with administrative and operational costs (such as scaffolding costs) incurred. We will provide a quote for these costs should you contact us to discuss the uninstallation and removal of your Goods. As noted at paragraph 10.3, if the installation work has been completed at this point, this could mean that you are charged a significant proportion of the agreed price, as it is likely to be impossible to re-fit the Goods to another property.
- 9.1.4 Where you are cancelling delivery and installation of your Goods, we request that you give us at least 24 hours' notice prior to your date of installation. This helps us ensure we can serve all customers efficiently.

9.2 **Ending the Sales Contract because of something we have done or are going to do.** If you are ending a Sales Contract for a reason set out at Clause 9.2.1 or 9.2.2 below, the Sales Contract will end immediately and we will refund you in full for any Goods which have not been provided to you. The reasons you can end this Sales Contract under this clause 9.2 are:

- 9.2.1 we have told you about an error in the price or description of the Goods you have ordered and you do not wish to proceed; or
- 9.2.2 you have a legal right to end the Sales Contract because of something we have done wrong, and depending on the nature of our breach of these terms, you may be entitled to compensation pursuant to your rights as a consumer.

9.3 **Exercising your right to change your mind (Consumer Contracts Regulations 2013).** For most products bought online you have a legal right to change your mind within 14 days and receive a refund. These rights, under the Consumer Contracts Regulations 2013, are explained in more detail in these terms at clause 9.4.

9.4 You have 14 days after the day you receive (or someone you nominate receives) the Goods, in which period you may cancel the Sales Contract. Where your Goods are split into several deliveries over different days, you have 14 days after the day you receive (or someone you nominates receives) the last delivery to change your mind about the Goods and cancel the Sales Contract.

9.5 If you would like us to install the Goods during the cancellation period referenced in clause 9.4 above, you will need to provide express written consent to install during that period. The form required for signing shall be included in your Sales Contract pack. Should you later decide to cancel the contract within your 14-day cancellation period, then you will have to pay reasonable charges for goods and services supplied up to the date that you cancel and for making good your property. This will include the reasonable fees for the work done so far and the reduced value of the Goods. Please note that the Goods, once installed, will be considered bespoke as they have been fitted to the requirements of your property.

## **10. HOW YOU MAY END THE SALES CONTRACT WITH US (INCLUDING IF YOU HAVE CHANGED YOUR MIND)**

10.1 To end the Sales Contract with us, you should let us know by calling customer services on 0808 196 6842 or email us at the address set out in the Product Terms. You should provide your name, home address, details of the order and, where available, your phone number and email address. You may also provide us with the cancellation notice set out at the schedule to these terms with your email or written cancellation, but we do not require this.

10.2 If you are entitled to, and choose to, end the Sales Contract pursuant to your rights under this Agreement or the Consumer Contracts Regulations 2013 after the Goods have been installed, you must contact us to arrange any uninstallation of the Goods by us. Please call customer services on 0808 196 6842 or email us at the address set out in the Product Terms to arrange the uninstallation. You must allow us to uninstall the Goods in these circumstances. If you end the Sales Contract for any reason after Goods have been dispatched to you or you have received them and the Goods have not been installed, you must let us know and arrange a time for collection with us.

10.3 We will pay the costs of return or uninstallation if the Goods are faulty or misdescribed, or we are legally required to do so because of something we've done wrong. In all other circumstances (including where you are exercising your right to change your mind during the 14 days following receipt of the Goods ordered pursuant to clauses 9.1.1 or 9.1.2) we may charge you for the reasonable costs and fees incurred in relation to the Goods and services received prior to cancellation. If we have commenced work prior to the expiry of the 14-day cancellation period with your consent, we will charge you reasonable fees for the work done so far and the reduced value of the Goods. If the installation work has been completed, this could

mean that you are charged a significant proportion of the agreed price, as it is likely to be impossible to re-fit the Goods to another property.

10.4 **We will make any refunds due to you as soon as possible.** If you are exercising your right to change your mind then:

- 10.4.1 for Goods which we have not offered to collect, your refund will be made within 14 days from the day on which we receive the Goods back from you or, if earlier, the day on which you provide us with evidence that you have sent the Goods back to us. For information about how to return Goods to us, see Clause 10.2.
- 10.4.2 In all other cases, your refund will be made within 14 days of you telling us that you have changed your mind.

## 11. OUR RIGHTS TO END THE CONTRACT

11.1 **We may end the Sales Contract if you break it.** We may end the Sales Contract at any time by writing to you if:

- 11.1.1 you do not make any payment to us when it is due and you still do not make payment within 28 days of us reminding you that payment is due; or
- 11.1.2 Where you have signed the Sales Contract and we are unable to contact you for a period of thirty (30) days following reasonable attempts to make contact;
- 11.1.3 you do not, within a reasonable time of us asking for it, provide us with information that is necessary for us to provide the Goods, for example, instructions regarding access to your property.

11.2 If we end the Sales Contract in the situations set out in Clause 11.1 we will refund any money you have paid in advance for Goods we have not provided.

## 12. IF THERE IS A PROBLEM WITH THE GOODS

12.1 If you have any questions or complaints about the Goods, you should contact us. You can find details of who to contact in the complaints policy provided in your Product Terms.

12.2 We will install your Goods with reasonable care and skill. Your Goods may be supplied with a warranty provided by the manufacturer of the product to cover defects in the Goods, depending on the relevant Goods and manufacturer in question. Any applicable manufacturer warranty documentation will be provided to you following installation of your Goods, and we will assist you with making a warranty claim should your Goods be defective under that manufacturer warranty.

12.3 In addition, we are under a legal duty to supply Goods that are in conformity with the Sales Contract and your rights as a consumer. Nothing in these terms will affect your legal rights.

### **13. PRICE AND PAYMENT**

13.1 The price of the Goods (which includes VAT) will be the price indicated on the Sales Contract. We take all reasonable care to ensure that the price of the Goods advised to you are correct. However please see Clause 13.6 for what happens if we discover an error in the price of the Goods you order.

13.2 If the rate of VAT changes between the date of the Sales Contract and the date that we supply the Goods, we will adjust the rate of VAT that you pay, unless you have already paid for the Goods in full before the change in the rate of VAT takes effect.

13.3 It is always possible that, despite our best efforts, some of the Goods we sell may be incorrectly priced. We will normally check prices before providing any quotes so that, where the Goods' correct price at the date of the Sales Contract is less than our stated price at the date of the Sales Contract, we will charge the lower amount. If the Goods' correct price at the date of the Sales Contract is higher than the price stated to you, we will contact you for your instructions and no contract will have been entered into.

13.4 We accept payment with American Express, China UnionPay, Discover & Diners Club, Japan Credit Bureau, Visa and Mastercard. When you must pay depends on what you are buying, and will be detailed in the Product Terms. We will not charge your credit or debit card until we dispatch the Goods to you.

13.5 If you do not make any payment due to us under the Sales Contract by the Due Date we may:

- 13.5.1 charge interest to you on the overdue amount at the rate of 4% a year above the base lending rate of the Bank of England from time to time. This interest shall accrue on a daily basis from the due date until the date of actual payment of the overdue amount, whether before or after judgement. You must pay us interest together with any overdue amount;
- 13.5.2 Pause or cancel any tariff linked to the Goods;
- 13.5.3 take such steps as are necessary to recover the sums due to us, which may include employing a debt collection agency;
- 13.5.4 provide information about your non-payment to credit reference agencies, which may impact your ability to get credit in the future; and/or
- 13.5.5 recover from you all costs incurred by us in pursuing your non-payment, including bank charges due to cancelled or failed

payments, the cost of visiting you, including through any debt collection agency.

13.6 If you think an invoice is wrong you must contact us promptly to let us know. You will not have to pay any interest until the dispute is resolved. Once the dispute is resolved we will charge you interest on correctly invoiced sums from the original due date.

#### **14. OUR RESPONSIBILITY FOR LOSS OR DAMAGE SUFFERED BY YOU**

14.1 If we fail to comply with these terms, we are responsible for loss or damage you suffer that is a foreseeable result of us breaking this Sales Contract or us failing to use reasonable care and skill, but we are not responsible for any loss or damage that is not foreseeable. Loss or damage is foreseeable if either it is obvious that it will happen or if, at the time the Sales Contract was made, both we and you knew it might happen, for example, if you discussed it with us during the sales process.

14.2 **We do not exclude or limit in any way our liability to you where it would be unlawful to do so.** This includes liability for death or personal injury caused by our negligence or the negligence of our employees, agents or subcontractors; for fraud or fraudulent misrepresentation; or for breach of your legal rights in relation to the Goods as summarised at Clause 12.2.

14.3 **We will make good any damage to your property caused by us when installing the Goods.** However, we are not responsible for the cost of repairing any pre-existing faults or damage to your property that we discover while installing the Goods.

14.4 **We are not liable for business losses.** We only supply the Goods for domestic and private use. If you use the Goods for any commercial, business or re-sale purpose we will have no liability to you for any loss of profit, loss of business, business interruption, or loss of business opportunity.

14.5 Octopus does not limit or exclude its liability where doing so would be unlawful. Otherwise, and subject to clauses 14.1, 14.2, 14.3, and 14.4 of these General Terms, our total aggregate liability under your Sales Contract shall not exceed the sum of £30,000.

#### **15. DATA PROTECTION**

15.1 You agree that we may use any personal data that you provide to us in accordance with our Privacy Policy which is available on our website at <https://octopus.energy/policies/privacy-policy/>, and as set out in these terms. You further agree that we may share your personal data with distribution network operators and electricity systems operators (known as DSOs and ESOs respectively) for the purposes of submitting an application for installation of your Goods at your property, and such personal data shall be handled in accordance with that DSO or ESO's privacy policy in place from time to time.

15.2 Further provisions relating to data protection are set out in the Product Specific Terms.

## **16. MISCELLANEOUS TERMS AND CONDITIONS**

16.1 We may transfer our rights and obligations under these terms to another organisation. We will always tell you in writing if this happens and we will ensure that the transfer will not affect your statutory rights or rights under the Sales Contract.

16.2 You need our consent to transfer your rights to someone else. You may only transfer your rights or your obligations under these terms to another person if we agree to this in writing.

16.3 Nobody else has any rights under this Sales Contract. This Sales Contract is between you and us. No other person shall have any rights to enforce any of its terms. Neither we or you will need to get the agreement of any other person in order to end the Sales Contract or make any changes to these terms.

16.4 Notices to you under this Sales Contract will be sent by post or hand to the billing address, or in the case of email to the last known email address that you have provided to us. Notices to us under this Sales Contract must be sent by post to Octopus Energy Services Limited, UK House, 5th Floor, 164-182 Oxford Street, London, W1D 1NN, with a copy emailed to [notices@octoenergy.com](mailto:notices@octoenergy.com).

16.5 If a court finds part of the Sales Contract illegal, the rest will continue in force. Each of the paragraphs of these terms operates separately. If any court or relevant authority decides that any of them are unlawful, the remaining paragraphs will remain in full force and effect.

16.6 These terms are governed by English law and you can bring legal proceedings in respect of the Goods in the courts of England and Wales. If you live in Scotland you can bring legal proceedings in respect of the Goods in either the Scottish or the English courts. If you live in Northern Ireland you can bring legal proceedings in respect of the Goods in either the Northern Irish or the English courts.

## SCHEDULE

### MODEL Cancellation Notice

*(Complete and return this form only if you wish to withdraw from the Sales Contract)*

To Octopus Energy Services Limited, UK House, 5th Floor, 164-182 Oxford Street, London, W1D 1NN, 0808 164 1088.

I [\*] hereby give notice that I/ [\*] cancel my [\*] Sales Contract of sale of the following Goods [\*]/for the supply of the following Service [\*],

Ordered on [\*]/received on [\*],

Name of consumer(s),

Address of consumer(s),

Signature of consumer(s) (only if this form is notified on paper),

Date

## Solar Goods Product Terms

### 1. Introduction

1.1 These terms, together with the general terms and conditions of sale and installation (known as the Contract Terms) and your Estimated Quote (defined below) and, any Additional Works Quote (if applicable) and the OpenSolar documentation shall form the contract between you and Octopus Energy Services Limited (company number 10434397) ("we", "us", "our" and "Octopus") for the sale, purchase and installation of your Solar Goods. Any defined terms used in these Product Terms which are not otherwise defined here shall have the meaning given to them in the Contract Terms.

1.2 For the purposes of these terms, "solar PV" and "solar PV system" mean the solar photovoltaic panels, inverter, storage battery, controls, electrical hardware, wiring, fittings, ancillary components, any external modifications to the home including the roof, any internal modification to the home, earthworks, and other materials installed as part of the agreed solar PV system design (the **Solar Goods**).

1.3 Our ability to provide Solar Goods under the Sales Contract is dependent on the information you have provided to us in your Online Customer Journey. If any of this information changes you must let us know immediately as it may impact your Estimated Quote and/or our ability to complete your installation.

**1.4 If you are a Warm Home Discount Scheme customer, paragraph 10 sets out how these terms differ for your experience as a customer.**

### 2. Eligibility

- 2.1. To be eligible for us to install the Solar Goods at your property you must complete the Online Customer Journey, have the legal right to have the Solar Goods installed (both internal and external to your home) and obtain any required planning or building approvals required for your installation (collectively referred to as the **Eligibility Criteria**).
- 2.2. 2.2 Should you need to amend or update your Eligibility Criteria information, you must inform us as soon as you become aware of the change using the contact information in these terms, as it may impact our ability to complete the sale and installation.

### 3. The Customer Journey for Solar Goods

3.1 In order to place an order for Solar Goods, you will need to complete the Online Customer Journey which can be accessed using the following [link](#). You are responsible for making sure the information provided online is accurate and complete. If any of the information you provide changes you must let us know immediately as it may impact your Estimated Quote (as defined below) and/or our ability to complete your installation.

3.2 After you've submitted your enquiry online, we will contact you via phone call to complete the initial qualification in order to provide you with a personalised quote and discuss any next steps required (if applicable) (**Qualifying Phone Call**).

3.3 If based on the information that you have provided us with during the Online Customer Journey and the Qualifying Phone Call, we consider your property to be suitable for the Solar Goods, we will issue you with an Estimated Quote, which shall incorporate these Product Terms. In order to proceed, you will need to accept the Estimated Quote and pay an initial deposit as set out in the Estimated Quote via the provided payment system or email (**Deposit**).

3.4 Provided you have accepted the Estimated Quote and paid the Deposit, we will contact you to carry out a remote survey. We will then confirm if we can proceed with the remote survey or whether a home survey is required. The remote or home survey may indicate that Additional Works (see paragraph 5) are required to install your Solar Goods. We will outline any Additional Works required in writing and provide you with an Additional Works Quote (each as defined in paragraph 5) accordingly.

3.5 After the remote or/and home survey, we will confirm whether we can proceed, including confirming whether the Estimated Quote remains unchanged or whether Additional Works are required to install your Solar Goods (see paragraph 5). If we can proceed, we will provide you with the final version of the Sales Contract (including any Additional Works Quote, adjusted Estimated Quote and these Product Terms) to be signed using the DocuSign link we'll send you via email. The Sales Contract will constitute our formal offer to provide you with the Solar Goods.

3.5 If you or we decide not to proceed with the purchase of the Solar Goods and do not sign your Sales Contract, we will refund the Deposit. If we find that we are unable to complete an installation for any reason, we will inform you of this by phone or email and return any Deposit.

3.6 By signing the final version of the Sales Contract, the Sales Contract will become a binding contract between you and us.

3.7 We will do our best to install as planned, but we might not be able to complete an installation because you do not meet the property eligibility criteria for the Solar Goods, the Solar Goods are out of stock, because of unexpected limits on our resources which we could not reasonably plan for, because we have identified an error in the price or description of the Goods or because we are unable to meet a delivery deadline.

3.8 Upon installation of your Solar Goods, you will receive a document pack that includes information such as certificates, operating manuals and warranty documentation.

3.9 You must make full and final payment for installation of your Solar Goods within 5 days of completion of installation.

#### 4. Estimated Quotes

4.1 If we consider your property is likely to be suitable for Solar Goods, we will provide you with a price for the standard installation (and associated components required) to undertake the work (the **Estimated Quote**). A “**Standard Installation**” is an installation requiring only minor modifications to your home’s interior and exterior finished surfaces and adjacent grounds.

4.2 The price of the Estimated Quote entitles you to the following Standard Installation components and materials:

- (a) Solar photovoltaic panels of the size, quantity, capacity, and model deemed appropriate for your home by our rooftop solar PV technical experts;
- (b) Inverter of a size, as determined by us;
- (c) Compatible controls and connections
- (d) All electrical and hardware materials required to fit a properly functioning solar PV system at your home.

4.2 Your Estimated Quote price also includes the labour costs to complete your Standard Installation. Standard Installation labour does not include major modifications to your home’s roof, walls, or any structural members, any underground works, or other works deemed abnormal by our Solar Goods installation experts.

4.3 Any Estimated Quote that we provide is based on your answers about the relevant technical details of your home, which you provided to us as part of your Online Customer Journey or during the Qualifying Phone Call. Where we determine the technical details of your home differ from the answers you provided, we reserve the right to void your Estimated Quote and issue a new quote or quotes based on the latest information available.

4.4 The Estimated Quote does not include changes to your home’s electrical service that your Distribution Network Operator (DNO) may require, such as unlooping, or a three-phase (3-phase) power connection. If your home requires a main fuse (service cut-out) upgrade, we may be able to undertake these works for you, but where we are not allowed to do these additional works, your DNO may levy a separate charge for doing them.

4.5 Any Estimated Quote we provide constitutes our price for a Standard Installation that meets or exceeds Microgeneration Certification Scheme (MCS) standards and is not subject to reduction or discount from any customer-requested modifications of the system design.

4.6 Any Estimated Quote that we provide will be valid for thirty (30) days.

4.6.1 Should you wish to proceed with your Estimated Quote after such time, we may, at our discretion, elect to issue a new Estimated Quote.

4.6.2 After such time, where we have failed to contact you having made reasonable attempts to do so, we may, at our discretion, cancel your Estimated Quote.

4.6.3 In the event that we issue an Estimated Quote with incorrect details (including price), we will issue a corrected Estimated Quote based on the information you provided.

4.6.4 To accept the Estimated Quote and proceed with the installation of a solar PV system, you must pay the Deposit via a payment system provided to you via webpage or email.

## 5. Site Survey and Suitability

5.1 Even where you meet the Eligibility Criteria, there may be other factors which would prevent us from completing the installation or which would require additional works to be carried out first. We may, at our discretion, elect to conduct an on-site home survey following the payment of your Deposit to assess whether your property is suitable for Standard Installation.

5.2 Where we identify that your home is not eligible for our Standard Installation service, but that an installation is possible provided additional works are completed (**Additional Works**), we shall contact you and provide you with a quote for the additional cost. This quote shall either be a separate quote for the additional works (an **Additional Works Quote**) or an amended final sale price in your Sales Contract, which we will issue to you following completion of your home survey and Solar Goods design.

5.3 You may elect to accept the Additional Works Quote or Sales Contract via a link provided to you by web or email. Should you not wish to accept the Additional Works Quote or the Sales Contract, we will refund your Deposit.

5.4 Where we identify factors that prevent us from completing an installation even with additional works, we will refund your advance payment in full.

5.5 Whether we deem your home to be suitable for solar panel installation in accordance with our Standard Installation and any required Additional Works, we will perform the installation with reasonable skill and care, in a good and workmanlike manner and in accordance with the standards set by the MCS. We shall comply with all applicable laws. We will not make use of components or materials that are likely to cause the installed system to fail to meet MCS standards.

5.6 The exact make and specification of all components and materials shall be at our sole discretion and any changes to the specified schedule of materials and components, including any requested third-party components or materials, will be at our discretion.

## 6. System performance

6.1 We will provide you with an estimated output factor for your system (the **Output Factor**). The Output Factor will be calculated in accordance with the MCS Solar PV Standard methodology and a breakdown of the assumptions and inputs will be provided as part of the Estimated Quote and final Sales Contract. We are not responsible for any deviation in output from the Output Factor resulting from the assumptions and/or external factors provided to us being incorrect, incomplete or contain errors. Please note that this does not affect your statutory legal rights where the Solar Goods are misdescribed or defective.

6.4 If we have had to estimate or take remotely any of the factors that affect this estimate, we will carry out a full site survey before installation commences. If this survey results in a lower performance estimate than in this quote, you may choose to continue with the installation under the new performance estimate or you may cancel the Sales Contract.

## 7. Your Obligations

7.1 In purchasing any product under these terms and conditions, you confirm, acknowledge and agree that:

7.1.1 you will be the end user of the Solar Goods purchase and you confirm that you will be the Solar Goods owner and operator for the purposes of any manufacturer warranty;

7.1.2 the Solar Goods are not rated for life-support, critical or medical device use, and you will not use the Solar Goods purchased for life support or for any medical purpose, or in any scenario where the failure of power supply could lead to loss or life or personal injury;

7.1.3 you shall not modify, alter, or tamper with the Solar Goods;

7.1.4 you shall not move your Solar Goods from the location of installation without our consent;

7.1.5 you shall ensure the Solar Goods are connected to the internet at all times, except when interrupted by causes outside of your reasonable control;

7.1.6 you shall remain the end user of the Solar Goods, or notify us not less than 30 days in advance if you intend to change the end user of the Solar Goods; and

7.1.7 you shall download and install any relevant manufacturer software, and keep your product up to date with the latest software and product updates as made available from time to time by or on behalf of the manufacturer.

7.2 You shall compensate us for any loss, damages, claims and expenses (Losses) we suffer as a result of Your breach of the terms of paragraph 7.1, to the extent those Losses are:

- 7.2.1 reasonably foreseeable; and
- 7.2.2 not caused by a breach of the Sales Contract by us.

7.3 Any warranty provided under these terms does not replace or reduce your statutory rights under UK consumer law.

7.4 You agree that to the extent that any installation, repair, maintenance or management is required in respect of your Solar Goods or any related controls, you (or the homeowner, if different) shall agree a suitable time with us for such works to take place during our normal business hours, and you shall take reasonable care of your Solar Goods and any associated equipment; and ensure that your Solar Goods is at all times switched on and connected per the manufacturer's instructions to ensure continued use.

7.5 We will let you know if the manufacturer of your Solar Goods has provided a warranty in relation to the product you've purchased. You may need to register your product for that warranty in order to benefit from it, and we encourage you to read and understand the terms and conditions of that warranty at the point of registration. Any warranty provided under these terms and/or the Sales Contract does not replace or reduce your statutory rights under UK consumer law.

## **8. Finance for non-Warm Homes Discount Customers**

8.1 If you have applied for finance in order to purchase your Solar Goods, the following terms will apply.

8.1 Finance is offered through Zopa Bank Limited (company number: 10627575), trading as DivideBuy, which is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority, firm reference number 800542. Zopa Bank Limited is incorporated in England and Wales and has its registered office at: 1st Floor, Cottons Centre, Tooley Street, London, SE1 2QG. VAT Number 281765280. DivideBuy's trading address is First Floor, Brunswick Court, Brunswick Street, Newcastle-under-Lyme, ST5 1HH.

8.2 Octopus Energy Services Ltd is an appointed representative of Octopus Electric Vehicles Ltd and is a credit broker and not a lender. Octopus Electric Vehicles Limited is authorised and regulated by the Financial Conduct Authority, firm reference number 809736. You agree to us sharing your personal data with Zopa where you wish to apply for financing from them.

8.3 The finance agreement shall be between you and DivideBuy. DivideBuy can arrange fixed-term loans of 3, 5, and 7 years, with a fixed interest rate of 9.9% per annum. Acceptance of your application for finance shall be at Zopa's absolute discretion.

8.4 In the event that you intend to make alterations to your Solar Goods subsequent to finalising your finance agreement, resulting in an increased borrowing amount, you will need to initiate the finance application process again. This is because the finance offer will be based on your final price.

8.5 You acknowledge and agree that to the extent we agree to provide you with a refund of any sum in relation to your Solar Goods (other than the deposit referred to in paragraph 12.7), we are required to pay such sum to Zopa by way of a reduction to your outstanding finance balance, rather than to pay such sum to you directly.

8.6 As we have no direct relationship with the finance product, we are unable to address any finance-related queries and/or complaints, and you will need to reach out to DivideBuy directly. Their details can be found [here](#). We accept no responsibility for nor any liability in relation to the financing of your product.

8.7 The finance agreement covers the entire system price. Therefore, where we have taken a deposit from you, that amount will be refunded to you after both the sales agreement with us and the finance agreement with DivideBuy have been entered into.

## 9. Data Protection

9.1 As members of HIES (please visit <https://www.biessscheme.org.uk/who-we-are/about-hies/> to read more about the Consumer Code Body) and NAPIT (please visit <https://www.napit.org.uk/home-owner/why-choose-a-napit-member.aspx> to read more about the MCS Certification Body), you agree that we may provide such customer data to them as required in support of their quality monitoring procedures.

9.2 You agree that we may receive telemetry, diagnostic, and other system performance data from your installed Solar Goods, to include control modules, inverters, batteries, and other installed digital devices, whether or not you are under an energy import or export tariff agreement with us. Such data will be transmitted via your Solar Goods' control device. Any use of such data by ourselves will be conducted in accordance with applicable laws and our Privacy Policy, and you hereby agree to such use. Any use of such data by ourselves will be conducted in accordance with applicable laws and our Privacy Policy and you hereby agree to such use of your data from your Solar Goods. Please visit <https://octopus.energy/policies/privacy-policy/> to read more about the Octopus Energy Privacy Policy.

9.3 You agree that we, through our mobile application for Apple iOS or Google Android and selected third party tools and services, may send and receive telemetry, diagnostic, other system parameters and performance data.

9.4 You agree that we may access your Solar Goods remotely to allow control of the operation and functions of your system or its installed digital components through our mobile application, or by other remote means. This may include deciding to control the output of your Solar Goods within its normal operational parameters (per manufacturer's specification), and maintaining temperature thresholds set by you.

9.5 You agree that, where you are under a flexible energy import or export tariff ("Smart Tariff") agreement with us, you agree that we may, through our digital systems, remotely access your installed Solar Goods for the purpose of controlling

its operation and functions as required to deliver optimised system performance in support of your Smart Tariff.

9.6 You agree that we may share your personal data with any underlying product provider or manufacturer to assist with the provision of services under these terms and conditions, including but not limited to the delivery, installation and maintenance of your Solar Goods.

## **10. Warm Home Discount Customers**

10.1 Where you're benefiting from the Warm Home Discount Scheme, the following terms will apply:

10.1.2 we will get in touch with you if you're eligible for solar installation under this scheme.

10.1.3 you will not be liable for the cost of purchasing or installing the Solar Goods.

## **11. Contact Us**

11.1 We hope you don't have any issues with your Solar Goods, but if you do wish to contact us, please email [REDACTED] or call us on [REDACTED] and we will do our best to resolve the issue with you. Further details on our complaints policy can be found at <https://octopus.energy/unhappy-home-tech/>

**Version 1 - updated on 29 August 2024.**

**455W** LB Series

Higher power generation better LCOE



n-type with very Lower LID



Better Temperature Coefficient



Better low irradiance response



25-year product warranty



30-year linear power output warranty

**n-type Bifacial Double Glass  
High Efficiency Mono Module  
JAM54D41 LB****430-455****Comprehensive Certificates**

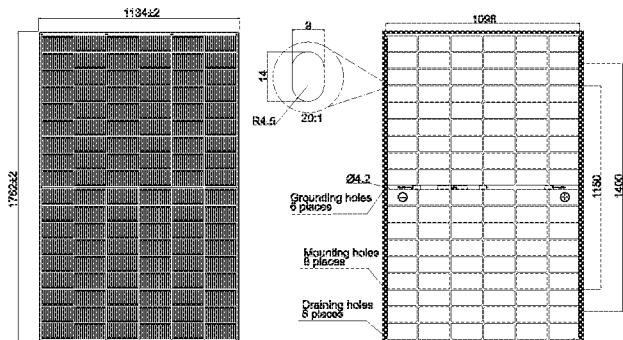
- IEC 61215, IEC 61730
- ISO 9001:2015 Quality management systems
- ISO 14001:2015 Environmental management systems
- ISO 45001:2018 Occupational health and safety management systems
- IEC 62941:2019 Terrestrial photovoltaic (PV) modules - Quality system for PV module manufacturing





455W

430-455 LB STC



Remark: customized frame color and cable length available upon request

Cell	Mono-16BB
Weight	22kg
Dimensions	1762x2mmx1134x2mmx30±1mm
Cable Cross Section Size	4mm <sup>2</sup> (IEC), 12 AWG(UL)
No. of cells	108(6x18)
Junction Box	IP68, 3 diodes
Connector	QC 4.10-351/ MC4-EVO2A
Cable Length (Including Connector)	Portrait: 300mm(+) / 400mm(-); Landscape: 1200mm(+) / 1200mm(-)
Front Glass/Back Glass	1.6mm/1.6mm
Packaging Configuration	36pcs/Pallet, 936pcs/40HQ Container

## ELECTRICAL PARAMETERS AT STC

TYPE	JAM54D41 -430/LB	JAM54D41 -435/LB	JAM54D41 -440/LB	JAM54D41 -445/LB	JAM54D41 -450/LB	JAM54D41 -455/LB
Rated Maximum Power(Pmax) [W]	430	435	440	445	450	455
Open Circuit Voltage(Voc) [V]	38.50	38.70	38.90	39.10	39.30	39.50
Maximum Power Voltage(Vmp) [V]	32.12	32.29	32.47	32.65	32.82	33.00
Short Circuit Current(Isc) [A]	14.14	14.23	14.31	14.40	14.48	14.56
Maximum Power Current(Imp) [A]	13.39	13.47	13.55	13.63	13.71	13.79
Module Efficiency [%]	21.5	21.6	22.0	22.3	22.5	22.6
Power Tolerance	0~+5W					
Temperature Coefficient of Isc(α_Isc)		+0.046%/°C				
Temperature Coefficient of Voc(β_Voc)		-0.260%/°C				
Temperature Coefficient of Pmax(γ_Pmp)		-0.300%/°C				
STC	Irradiance 1000W/m <sup>2</sup> , cell temperature 25°C, AM1.5G					

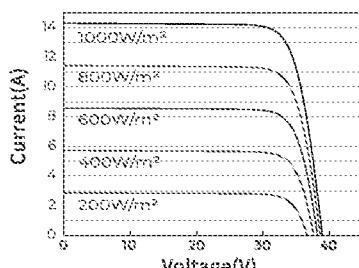
## ELECTRICAL CHARACTERISTICS WITH 10% SOLAR IRRADIATION RATIO

TYPE	JAM54D41 -430/LB	JAM54D41 -435/LB	JAM54D41 -440/LB	JAM54D41 -445/LB	JAM54D41 -450/LB	JAM54D41 -455/LB
Rated Max Power(Pmax) [W]	464	470	475	481	486	491
Open Circuit Voltage(Voc) [V]	38.50	38.70	38.90	39.10	39.30	39.50
Max Power Voltage(Vmp) [V]	32.11	32.29	32.47	32.65	32.82	32.99
Short Circuit Current(Isc) [A]	15.27	15.36	15.46	15.55	15.64	15.73
Max Power Current(Imp) [A]	14.46	14.55	14.63	14.72	14.81	14.89
Irradiation Ratio (rear/front)			10%			

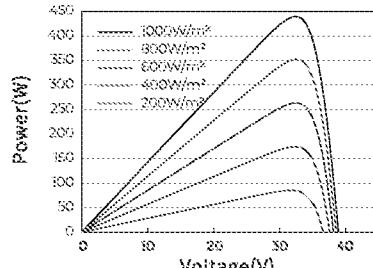
\*Bifaciality=Pmax,rear/Rated Pmax,front

## CHARACTERISTICS

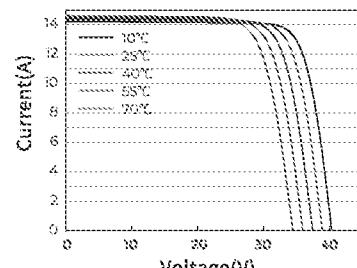
### Current-Voltage Curve JAM54D41-440/LB

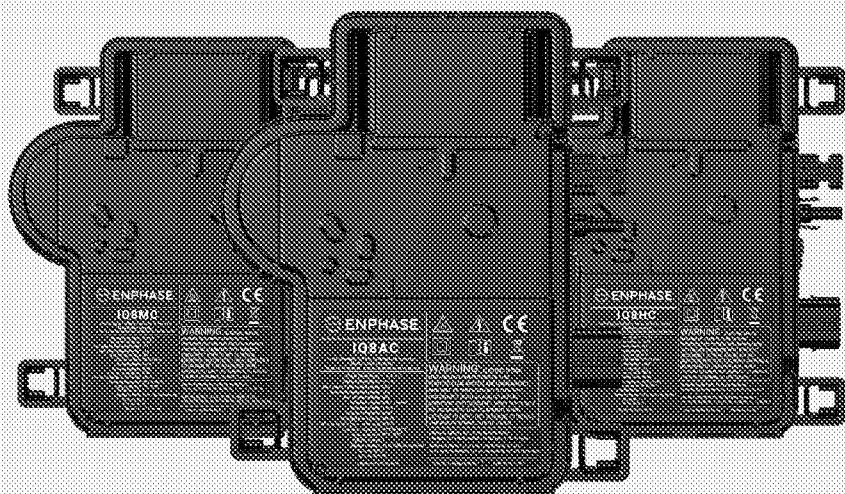


### Power-Voltage Curve JAM54D41-440/LB



### Current-Voltage Curve JAM54D41-440/LB





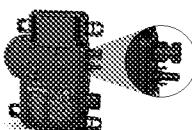
## IQ8 Series Microinverters

The high-powered, smart grid-ready IQ8 Series Microinverters are designed to match the latest generation high output PV modules. The IQ8 Series Microinverter has the highest energy production and reliability standards in the industry, and with rapid shutdown functionality, it meets the highest safety standards. The brain of the semiconductor-based microinverter is our proprietary, application-specific integrated circuit (ASIC) that enables the microinverter to operate in a grid-connected mode.

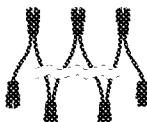


### IQ Gateway

The IQ Gateway is the platform for energy management and integrates with the IQ Microinverters to provide complete control and insights into the Enphase Energy System.



**IQ8 Series with integrated MC4 connectors**  
Connect PV modules quickly and easily to the IQ8 Series Microinverters that have integrated MC4 connectors.



### IQ Cabling

Install microinverters quickly and safely with IQ Cabling. With multi-phase IQ Cabling, the installed capacity is automatically distributed evenly across all three phases.



**IQ8 Series Microinverters** redefine reliability standards with more than 1 million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.\*

### Compatible with latest generation high-output PV modules

- Supports the latest high-current PV modules
- Supports all common PV module powers and cell architectures

### Easy to install and commission

- Lightweight and compact with integrated Stäubli MC4 connectors for easy installation
- Fast installation with simple AC cabling
- Faster firmware upgrades enabled by the new integrated circuit technology

### High energy production, reliability, and safety

- More than 1 million power-on hours of reliability testing
- Patented Burst Mode technology provides increased energy production
- Low-voltage DC and rapid shutdown for the ultimate fire safety

#### Note:

- (i) Commissioning of IQ8 Series Microinverter systems requires Enphase Installer App version 3.31.0 or higher.
- (ii) IQ8 Series Microinverters cannot be mixed together with previous generations of Enphase microinverters (IQ7 Series, IQ6 Series and so on) on the same IQ Gateway.

\*25-year warranty is valid, provided an internet-connected IQ Gateway is installed.

# IQ8 Series Microinverters

INPUT DATA (DC)		UNITS	IQ8MC-72-M-INT	IQ8AC-72-M-INT	IQ8HC-72-M-INT
Typical module compatibility			54-cell/108-half-cell, 60-cell/120-half-cell, 66-cell/132-half-cell, 72-cell/144-half-cell		
Minimum/Maximum input voltage	$U_{dcmin}/U_{dcmax}$	V		18/60	
Start-up input voltage	$U_{dcstart}$	V		22	
Rated input voltage	$U_{dc,r}$	V	35.0	36.5	37.0
Minimum/Maximum MPP voltage	$U_{mppmin}/U_{mppmax}$	V	25/45	28/45	29.5/45
Minimum/Maximum operating voltage	$U_{opmin}/U_{opmax}$	V		18/49	
Maximum input current	$I_{dcmax}$	A		14	
Maximum short-circuit DC input current	$I_{dcmax}$	A	Maximum short circuit current for modules ( $I_{sc}$ ) allowed to be paired with IQ8 Series Microinverters: 20 A (calculated with 1.25 safety factor as per IEC 62548).		
Maximum input power <sup>1</sup>	$P_{dcmax}$	W	480	530	560
OUTPUT DATA (AC)		UNITS	IQ8MC-72-M-INT	IQ8AC-72-M-INT	IQ8HC-72-M-INT
Maximum apparent power	$S_{ac,max}$	VA	330	366	384
Rated power	$P_{ac,r}$	W	325	360	380
Nominal grid voltage	$U_{acnom}$	V		230	
Minimum/Maximum grid voltage	$U_{acmin}/U_{acmax}$	V		184/276	
Maximum output current	$I_{acmax}$	A	1.43	1.59	1.67
Nominal frequency	$f_{ac,n}$	Hz		50	
Minimum/Maximum frequency	$f_{min}/f_{max}$	Hz		45/55	
Maximum units per single/Multi-phase 20 A circuit	16 A/ $I_{acmax}$		11 (L+N)/33 (3L+N)	10 (L+N)/30 (3L+N)	9 (L+N)/27 (3L+N)
For IQ Cable with 2.5 mm <sup>2</sup> stranded conductors and using a 1.25 safety factor, 16 A per phase is calculated as the maximum current according to IEC 60364. Safety factors applied may vary based on local regulations or best practices, also upon the characteristic the OCPD selected.			8 (L+N)/18 (3L+N)	8 (L+N)/18 (3L+N)	8 (L+N)/18 (3L+N)
Maximum units per single/Multi-phase IQ Cable section			Centre feeding is the best practice. These design limits should ensure voltage rise and line conductor resistance on the IQ Cable are maintained within acceptable limits. In locations with a risk of high grid voltage at the point of connection, it may be necessary to decrease the maximum number of microinverters on the IQ Cable section by as much as 50%.		
Protective class (all ports)			II		
Total harmonic distortion		%		< 5	
Power factor setting				1.0	
Power factor range	cosphi			0.8 leading – 0.8 lagging	
Inverter maximum efficiency	$\eta_{max}$	%	97.5	97.3	97.4
European weighted efficiency	$\eta_{EU}$	%	96.7	96.6	96.8
Inverter topology			Isolated (HF transformer)		
Nighttime power loss		mW		50	
MECHANICAL DATA			IQ8MC-72-M-INT	IQ8AC-72-M-INT	IQ8HC-72-M-INT
Ambient air temperature range			-40°C to 65°C (-40°F to 149°F)		
Relative humidity range			4% to 100% (condensing)		
Overvoltage class AC port				III	
Number of input DC connectors (pairs) per single MPP tracker				1	
AC connector type			IQ Cabling (refer to the cable accessories datasheet)		

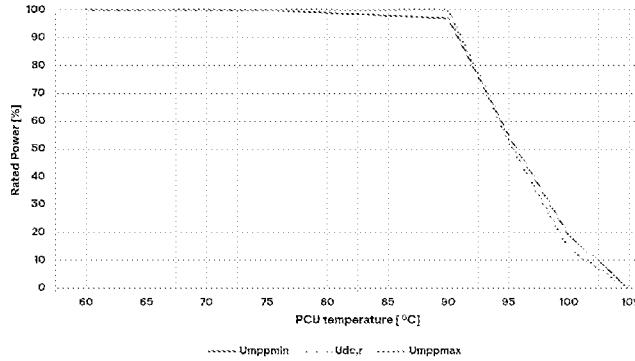
<sup>(1)</sup> Pairing PV modules with wattage above the limit may result in additional clipping losses. See the compatibility calculator at <https://enphase.com/en-us/installers/microinverters/calculator>.

MECHANICAL DATA	IQ8MC-72-M-INT	IQ8AC-72-M-INT	IQ8HC-72-M-INT
DC connector type		Stäubli MC4	
Dimensions (H x W x D)		212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2") (without mounting brackets)	
Weight (with mounting plate)		1.1 kg (2.4 lbs)	
Cooling		Natural convection – no fans	
Enclosure		Class II double-insulated, corrosion-resistant polymeric enclosure	
IP rating		Outdoor – IP67	
Altitude		< 2600 m	
Calorific value		37.5 MJ/unit	
STANDARDS	IQ8MC-72-M-INT	IQ8AC-72-M-INT	IQ8HC-72-M-INT
Grid compliance		G98, G99, G100	
Safety		EN IEC 62109-1, EN IEC 62109-2	
EMC		EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-1, EN55011 <sup>2</sup>	
Product labelling		CE	
Advanced grid functions <sup>3</sup>		Power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos (phi) (P)	
Microinverter communication		Power line communication (PLC) 110 – 120 kHz (Class B), narrow band 200 Hz	

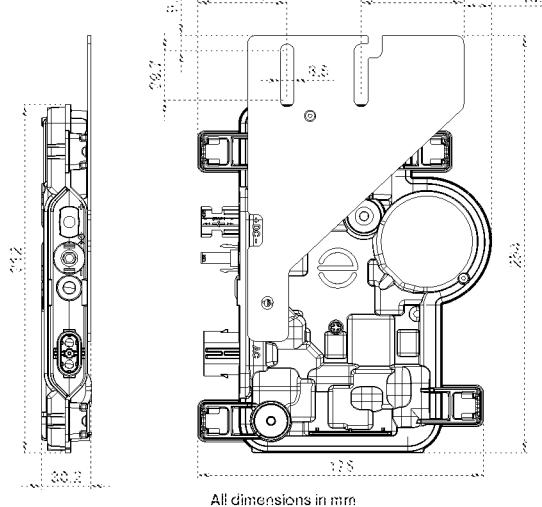
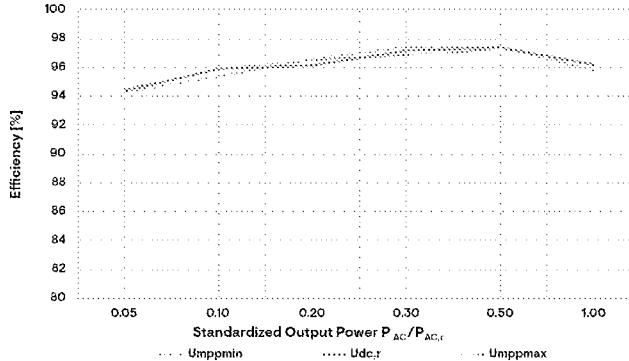
(2) At STC within MPP range.

(3) Some of these functions require IQ Gateway Metered with current transformers and/or IQ Relay installed.

**IQ8 Series Microinverters rated power v/s PCU temperature**

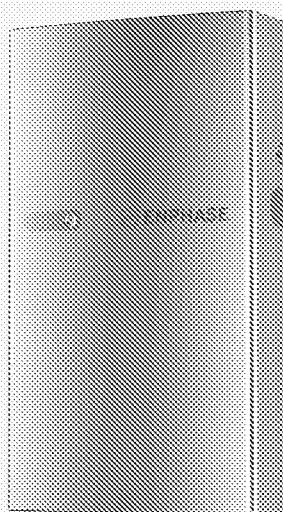


**IQ8 Series Microinverters efficiency curve**



## Revision history

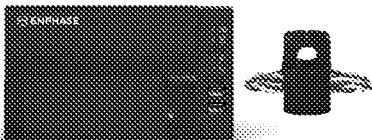
Revision	Date	Description
DSH-00198-2.0	September 2023	Initial release
DSH-00198-1.0	August 2023	Preliminary release



## IQ Battery 5P

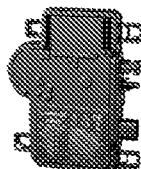
IQ Battery 5P all-in-one AC-coupled system is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes six embedded IQ8D-BAT Microinverters with a 3.2 kVA continuous power rating.

### Components of the Enphase Energy System



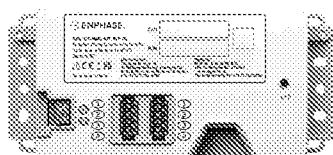
**IQ Gateway and current transformers (CTs)**

Provides complete control and insights into the Enphase Energy System. IQ Gateway is shipped with two CTs to enable production and consumption monitoring with an accuracy of  $\pm 1\%$ .



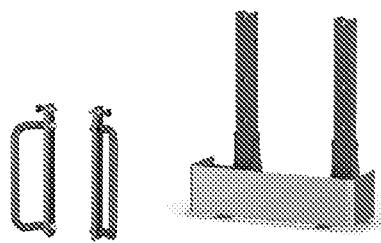
**IQ Microinverters**

IQ Series Microinverters pack more power into less space than other rooftop solar systems and make rooftop solar more productive, reliable, smart, and safe.



**Communications Kit 2 INT**

The Enphase Communications Kit 2 INT enables wired communication between IQ Gateway Metered and IQ Battery 5P using Control cables.



**IQ Battery 5P accessories**

The IQ Battery 5P lifting handles are reusable and ease the installation process. The IQ Battery 5P pedestal enables floor mounting of the IQ Battery 5P.



### Powerful

- Provides 3.2 kVA continuous power
- Includes six embedded IQ8D-BAT Microinverters

### Reliable

- 15-year limited warranty
- Cools passively with no moving parts or fans
- Uses wired communication for fast and consistent connection
- Updates software and firmware remotely

### Simple

- Fully integrated AC-coupled battery system
- Installs and commissions easily
- Supports Self-Consumption mode of operation
- Offers homeowners remote monitoring and control from the Enphase App
- Field replaceable components

### Safe

- Meets UL 9540A, the highest industry standard for battery safety
- Uses lithium iron phosphate (LFP) chemistry for maximum safety and longevity

### Grid compliance

- EREC G98, G99, and G100 Issue 2 Amd 2

# IQ Battery 5P

PRODUCT DETAILS		UNIT	IQBATTERY-5P-1P-INT
Name	--		IQ Battery 5P
Description	--		The IQ Battery 5P with integrated IQ8D-BAT Microinverters and battery management system (BMS) with battery controller
OUTPUT (@230 VAC)			
Rated (continuous) output apparent power <sup>2</sup>	kVA		3.2
Nominal voltage	VAC		230
Nominal voltage range	VAC		195–253
Nominal frequency	Hz		50
Nominal frequency range	Hz		47.5–51.5
Rated output current <sup>3</sup>	A		13.9
Power factor (adjustable)	--		0.8 leading ... 0.8 lagging
Interconnection	--		Single-phase
AC round-trip efficiency <sup>3</sup>	%		90
Optimum operating temperature range	°C		0 to 30
Operating modes	--		Self-Consumption and charge from the grid
BATTERY MODULE			
Usable capacity	kWh		5.0
DC round-trip efficiency	%		96
Nominal DC voltage	V		76.8
Ambient operating temperature (charging) <sup>4</sup>	°C		-20 to 50 (non-condensing)
Ambient operating temperature (discharging) <sup>5</sup>	°C		-20 to 55 (non-condensing)
Chemistry	--		Lithium iron phosphate (LFP)
PERFORMANCE DATA			
Dimensions (H x W x D)	mm		980 x 550 x 168
Lifting weight	kg		66.3
Total installed weight	kg		78.9
IQ Battery enclosure	--		Outdoor-IP55
IQ8D-BAT Microinverter enclosure	--		Outdoor-IP67
Cooling	--		Natural convection
Altitude	m		<2500
Mounting	--		Wall-mount (included) or pedestal-mount (sold separately)
COMMUNICATION/INTERFACES			
Communication	--		Wired control communication
Monitoring	--		Enphase Installer Platform and Enphase App monitoring options; API integration
STANDARDS			
Grid compliance	--		G98, G98 NI, G99, G99 NI, G100-2
Safety	--		UN 38.3, EN 62040-1, IEC 62619 2022, EN IEC 62109-1 & 2, IEC/EN 62116
EMC	--		EN 61000-3, EN 61000-6 EMC, EN 55011:2016+A11:2020, IEC 61326-1, EN 50065-1, EN 50065-2-2
EC Declaration of Conformity <sup>6</sup>	--		Electro Magnetic Compatibility (EMC) Directive 2014/30/EU, Low Voltage Directive (LVD) 2014/35/EU, Restriction of Hazardous Substances (RoHS), 2011/65/EU, and Battery Directive 2006/66/EC
Product labelling	--		CE
LIMITED WARRANTY			
Limited warranty	--		>60% capacity, up to 15 years or 6000 cycles <sup>7</sup>

(1) Supported in grid-tied operation.

(2) Limited by software.

(3) AC to the battery to AC at 50% power rating at 25°C, and at the beginning of life.

(4) Reduction in charging power will occur at temperatures below 15°C and above 45°C.

(5) Reduction in discharge power will occur at temperatures below 5°C and above 50°C.

(6) The full text of the EU Declaration of Conformity (DoC) is available at <https://enphase.com/en-uk/installers/resources/documentation>.

(7) Whichever occurs first. Restrictions apply. The full text of the warranty is available at <https://enphase.com/en-uk/warranty/uk>

## WHAT'S IN THE BOX

## ORDER CODE: IQBATTERY-5P-INT-INT

IQ Battery 5P	Base battery unit of IQ Battery 5P with six integrated IQ8D-BAT Microinverters
ID cover and conduit cover	IQ Battery 5P cover with two conduit covers for the left and right sides of the unit
Bottom mounting bracket and top protective shield	Bottom mounting bracket for mounting the battery on the wall and one top protective shield
M5 locking screws	Two M5 locking screws for securing the battery unit on the bottom mounting bracket
M4 grounding screws	Two M4 grounding screws for securing the top protective shield on the bottom mounting bracket
M6 ID cover grounding screws	Two M6 ID cover grounding screws for the EMI/EMC requirement
Cable ties	Six cable ties for securing field cables to the unit
Control (CTRL) connector	One pre-installed and one spare CTRL connector without resistor for CTRL wiring
Control (CTRL) connector with resistor	One pre-installed and one spare CTRL connector with resistor for CTRL wiring
Quick install guide (QIG)	QIG for IQ Battery 5P unit installation instructions
Drill template	Two drill templates for marking drilling locations on the mounting surface

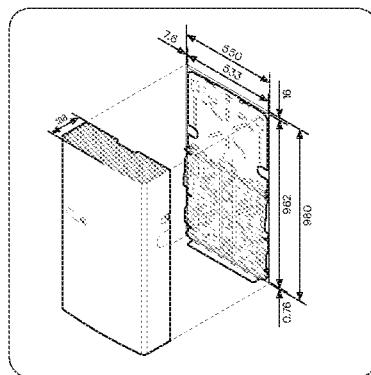
## ACCESSORIES AND REPLACEMENT PART

IQ8D-BAT-RMA	IQ8D-BAT Microinverter for field replacement
B05-T02-INT00-1-2-RMA	IQ Battery 5P unit for field replacement
B05-CX-0550-O	IQ Battery 5P cover for field replacement
B05-PM-0550-O	IQ Battery 5P pedestal mount
B05-CP-096-O	IQ Battery 5P conduit plates for field replacement. Includes one left-side and one right-side conduit plate
B05-WB-0543-O	IQ Battery 5P wall bracket for field replacement. Includes one bottom mounting bracket and one top protective shield
IQBATTERY-HNDL-5	IQ Battery 5P lifting handles. Includes one left-side and one right-side lifting handle
B05-ACFB-080-O	IQ Battery 5P AC filter board for field replacement
B05-BMSIA-0490-O	IQ Battery 5P BMS board for field replacement
B05-CANBR-063-O	IQ Battery 5P control communication board for field replacement
B05-IICS-0524-O, B05-IUICS-0524-O	IQ Battery 5P control switch pre-installed on the wiring cover for field replacement

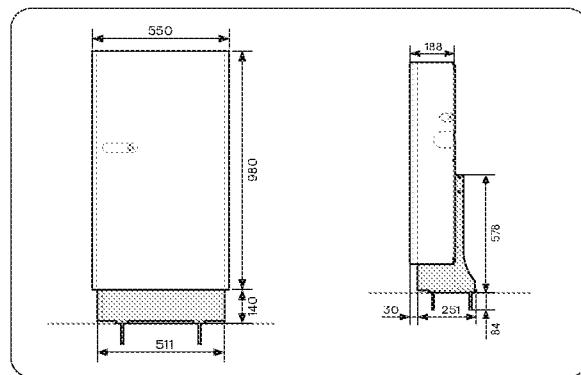
## COMPATIBILITY

IQ Battery	IQ Battery 5P
IQ Gateway	IQ Gateway Metered
Communications Kit	Communications Kit 2 INT
Solar inverters	IQ Series Microinverters, third-party PV string inverters

## Dimensions in mm



Wall-mounted



Floor-mounted with pedestal

## Note for third-party products:

Any third-party manufacturer or importer of product(s) used to install or commission Enphase product(s) shall comply with the applicable EU Directive(s) and requirements in the European Economic Area (EEA). It is the responsibility of the installer to confirm that all such products are labelled correctly and have the required compliant supporting documentation.

### Manufacturer:

Enphase Energy Inc., 47281 Bayside Pkwy, Fremont, CA, 94538, United States of America, PH: +1 (707) 763-4784

### Importer:

Enphase Energy NL B.V., Het Zuiderkruis 65, 5215MV, 's-Hertogenbosch, The Netherlands, PH: +31 73 3035859

Assembled in China

# Revision history

REVISION	DATE	DESCRIPTION
DSH-00166-6.0	March 2024	Corrected the warranty badge on the first page.
DSH-00166-5.0	February 2024	Updated the foot note and made editorial updates.
DSH-00166-4.0	January 2024	Updated the target region to "Great Britain" and made editorial updates.
DSH-00166-3.0	November 2023	<ul style="list-style-type: none"><li>Updated the IQ Battery dimensions in the diagram.</li><li>Updated SKU.</li></ul>
DSH-00166-2.0	September 2023	Editorial updates, updated images, and added warranty webpage link.
DSH-00166-1.0	August 2023	Initial release.
Previous releases.		