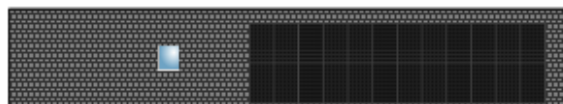


# System Overview

Your system comprises **24 Perlight Delta 425W Total Black Mono solar panels** to collect sunlight and turn it into DC electricity.

The panels will be connected to **1 Growatt MIN 10000 TL-X2 Three MPPT 1ph inverter** and **1 SolaX X1 G4 7.5 FIT AC inverter**, which convert the DC electricity into mains (AC) electricity.



A **SolaX Triple 5.8kWh LFP Battery** battery storage system will allow you to store excess energy from sunny days, so that you can use your generated electricity at night too.

We include all the isolators, wiring and meters needed to connect the system safely to your electrical system. Your system will be installed and certified by our trained installation team.



## Solar Panels: Perlight Delta 425W Total Black Mono x 24

The latest generation of Perlight's ever-popular Delta range offers a totally all-black appearance through the use of ribbon busbar technology.

Model	PLM-425OM10A-44B
Power	425 watts
Dimensions	1096 x 1812mm

## Inverter



### Growatt MIN 10000 TL-X2 Three MPPT 1ph

Compact residential inverter with Three MPPT



### SolaX X1 G4 7.5 FIT AC

The SolaX X1 G4 FIT is the perfect retrofit ac charging solution for triple power batteries.

# System components



## Battery: SolaX Triple 5.8kWh LFP Battery x 2

With a 10-year warranty and 90% depth of discharge, the new Triple Power battery is a flexible, practical, high-performance energy storage.

Capacity	5.800 kWh
Quantity	2



## Mounting: GSE roof-integrated mounting system

A roof integrated mounting system from French manufacturer GSE Integration works with a range of panels, and is ideal for both new build and retrofit ...

Designed for	Natural Slate roofs
Colour	Not specified

# System Performance

We have made an estimate of the annual energy generation of your system. This takes into account the following factors that affect the output of a solar array.

## The location of the system

Sunlight is weaker near the poles than near the equator. We use data from a meteorological model of the intensity of sunlight over the course of the year in different locations all over the world.

## The orientation of the system

Solar panels that face south receive a little more sunlight than panels that face east or west. However, in diffuse light the orientation of the panels makes little difference, so the effect is less marked than many people imagine.

## The degree of shading

If you have trees, neighbouring buildings or nearby high ground that will shade your PV array, the output of the system will be reduced. We have used a 'sunpath diagram' that estimates how often sunlight will be blocked from reaching the panels.

We expect your system to generate  
**8,660 kWh per year**

### Installation data

Installation capacity of PV system - kWp (stc)	10 kWp
Orientation of the PV system - degrees from South	-15°
Inclination of system (pitch) - degrees from horizontal	27°
Postcode region	Zone 7E

### Performance Calculations

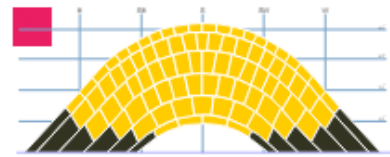
kWh/kWp (Kk)	See sunpath diagrams
Shade Factor (SF)	See sunpath diagrams
Estimated output (kWp x Kk x SF)	8660 kWh

## Roof diagram

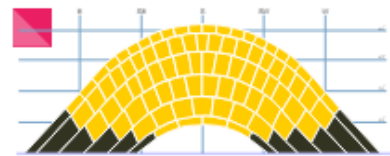


Roof South Orientation: -15° Pitch: 27°

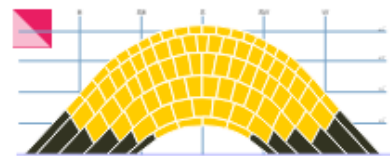
## Sunpath diagrams



Shade factor: 1.00 Kk: 849



Shade factor: 1.00 Kk: 849



Shade factor: 1.00 Kk: 849

Important note: The performance of solar PV systems is impossible to predict with certainty due to the variability in the amount of sunlight from location to location and from year to year. This estimate is based upon a model that takes account of meteorological data at your location and makes an allowance for losses due to shading of the panels. This is a complex calculation however, and no model can be 100% accurate. It should not be considered a guarantee of performance.

If shading is present on your system that will reduce its output to the factor stated. This factor was calculated using industry standard shading methodology and we believe that this will yield results within 10% of the actual energy estimate stated for most systems.