



Datasheet

ENGLISH

12V Solar Panels

BENEFITS

Reliable and Robust Design

Proven materials, tempered front glass, and a sturdy anodized frame allow panels to operate reliably in multiple mounting configurations.

Classic Design

Combines high efficiency and attractive crystalline cells give an elegant appearance.

More Power

Using industry leading 17.0% efficiency solar cells delivers incredible performance.



(10WP Panel shown)

MONO & POLY-CRYSTALLINE (12 VOLT) SILICONE SOLAR CELL MODULES

5WP – 150WP

Features

- Modules are designed in accordance with IEC61215:1993 standards, manufactured with proven materials and tested to ensure electrical performance and service life.
- SiN film deposited on the front surface by PECVD acts as anti- reflection coating and gives a uniform dark blue appearance.
- Cells are laminated between highly transparent low-iron 3mm tempered glass, TPT and two layers of EVA to prevent moisture penetrating the module.
- Heavy duty anodized aluminium frame provides high wind resistance and convenient mounting access.
- Waterproof junction box and terminals allows for quick and simple connection.
- Modules will either be supplied with no cable, cable supplied but not connected to the junction box or fully fitted – depending on the option selected. Supplied cables guarantee excellent power transmission throughout the year.
- There is no current requirement for the STI Solar Modules to comply with ROHS.
- 20 year power output transferable warranty



PV MODULES MADE WITH IEC 61215 CERTIFICATION

| Model | Output Wp | Size mm | Weight Kgm | Pmax W | Vmp V | Imp A | Voc V | Isc A |
|---------|-----------|-----------------|------------|--------|-------|-------|-------|-------|
| 9046128 | 5 | 250 x 200 x 25 | 1.0 | 5 | 16.8 | 0.3 | 21 | 0.39 |
| 9046121 | 10 | 397 x 280 x 25 | 1.5 | 10 | 16.8 | 0.59 | 21 | 0.66 |
| 9046125 | 20 | 638 x 278 x 25 | 2.2 | 20 | 17.5 | 1.15 | 22 | 1.27 |
| 9046134 | 30 | 660 x 380 x 25 | 2.8 | 30 | 17.5 | 1.72 | 22 | 1.90 |
| 9046137 | 45 | 634 x 535 x 25 | 4.5 | 45 | 17.5 | 2.58 | 22 | 2.86 |
| 9046131 | 60 | 685 x 670 x 35 | 6.0 | 60 | 17.2 | 3.49 | 21.6 | 3.97 |
| 9046140 | 80 | 815 x 670 x 35 | 7.8 | 80 | 17.2 | 4.65 | 21.6 | 5.00 |
| 9046143 | 100 | 1055 x 670 x 35 | 8.0 | 100 | 19.55 | 5.12 | 23.15 | 5.45 |
| 9046147 | 120 | 1250 x 670 x 35 | 12.0 | 120 | 17.2 | 6.98 | 21.6 | 7.93 |
| 9046156 | 150 | 1490 x 670 x 35 | 15.2 | 150 | 17.2 | 8.72 | 21.6 | 9.72 |

CERTIFICATIONS

| | |
|-------------------------------------|--------------------|
| ISO9001 (2008) | 1014QMO5 |
| TUV / IEC61215 | PV60040905 |
| IEC61710 (Salt Mist Corrosion Test) | 4786191107-NABL-S1 |
| CE | G4M20301-0199-E-16 |

MATERIALS

| | |
|-------------|-------------------------|
| Frame | Aluminium 6063 T5 |
| Front Cover | High-transmission Glass |

WARRANTY

All RS Components solar modules are supplied with a 20 year limited peak power warranty. The warranty claim will be deemed to be valid if within 20 years any solar module exhibits power output at less than 80% of minimum 'Peak Power Standard Test Conditions' as noted on the data plate of each module and/or any fault is determined to be the cause of defects in materials and workmanship but not where interference with the module/s by an unauthorised person (of RS Components) has caused the fault or defect. The warranty includes any call outs, labour and other expenses associated with the repair or replacement of the defective part module. RS Components may, at its discretion offer one of the following remedies in the event of a successful claim against the module performance warranty: 1) to replace the defective module/s 2) refund the percentage of the cost of the module to the customer representing the percentage of the power output less than 80% of the minimum. RS Components endeavours to but is not bound by its commitment to rectify any fault within 7 days of notification.

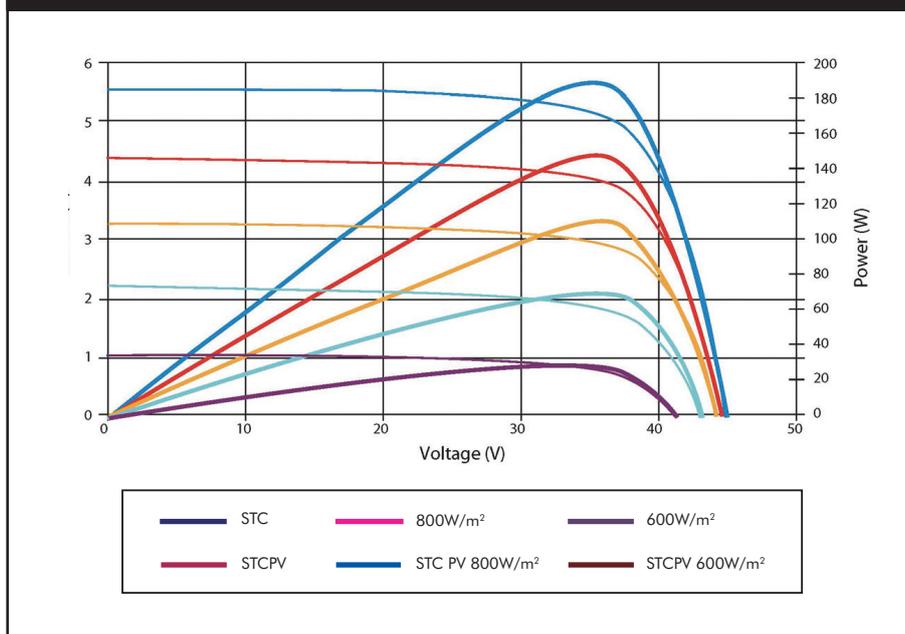
ABSOLUTE MAXIMUM LIMITS

| PARAMETERS | RATING | UNIT |
|------------------------------|------------|------|
| Operating temperature | -40 to +85 | °C |
| Storage temperature | -40 to +85 | °C |
| Dielectric voltage withstood | 3000max | V-DC |
| NOCT | 48 | °C |

TEMPERATURE COEFFICIENTS

| | | |
|---------------------------------|---------|-----------|
| Current temperature coefficient | dIsc/dT | +0.003A/K |
| Voltage temperature coefficient | dVoc/dT | -0.13V/K |
| Power temperature coefficient | dPm/dT | -0.675W/K |

IV CURVE



ALL FIGURES TAKEN UNDER THE FOLLOWING STANDARD TEST CONDITIONS:
IRRADIANCE 1000W/M², MODULE TEMPERATURE 25°C, AM=1.5

(All technical data subject to changes without prior notice)