

CSG PVTECH CO.,LTD.



Several decades of experience in manufacturing, the complete PV chain including silicon materials, ingot, wafer, solar glass, solar cell and module, and ISO90001 & ISO14001 certified factory, ensure excellent raw materials and production control.



Modules certified by TUV Rheinland (IEC61215, IEC 61730 standards) in the extreme conditions (temperature, load, impact) with good performance. Pass strict tests of solar modules including Salt-mist Corrosion Test, Fire Test, Ammonia Resistance Test, PID Test, Sand Abrasion Test and Carbon Footprint Assessment in TUV.



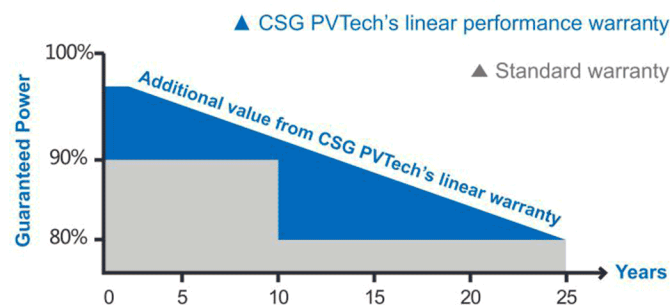
The good weak light performance (morning, evening and cloudy day) has been tested and approved by professional third-party.



Guaranteeing from 0 to +6W as power tolerance, customers can obtain 5.8% power more than conventional output.



100% EL test before and after lamination, and finished products EL test, providing higher quality assurance.

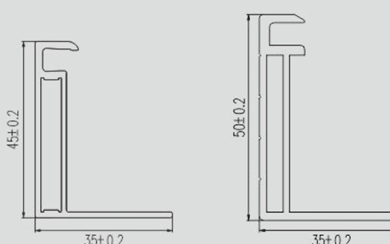
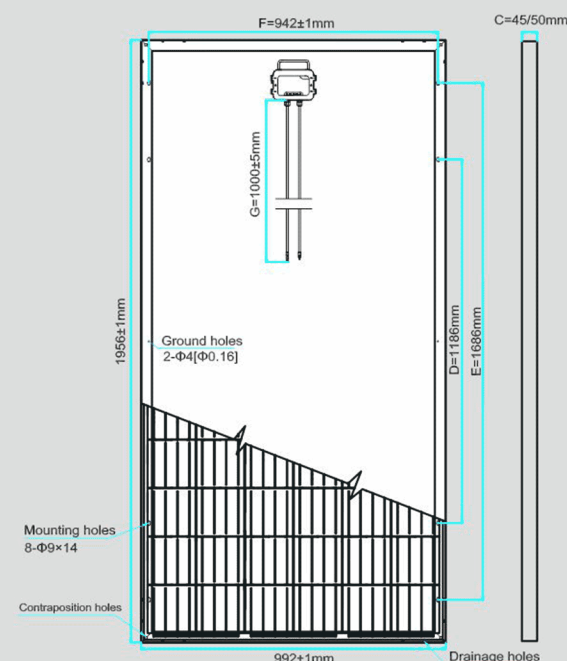


For a period of twenty-five (25)years commencing on the Warranty Start Date, loss of power output of the nominal power output measured at Standard Test Conditions (STC) for the Product(s) shall not exceed:

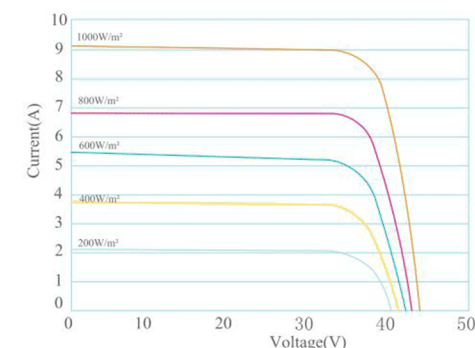
- 1.For Polycrystalline Products: 2.5% in the first year, thereafter 0.7% per year,ending with 80.7% in the 25th year after the Warranty Start Date.
2. For Monocrystalline Products: 3 % in the first year, thereafter 0.708% per year, ending with 80.008% in the 25th year after the Warranty Start Date.



High Efficiency
Poly-crystalline Solar Module



I-V Curves



I-V Curves of PV module CSG 315W at different light power

Typical Electrical Characteristics

| | | | | | | | |
|------------------------------------|---|------|------|------|------|------|------|
| Solar cells: | Poly-Crystalline 156X156mm 72pcs (6×12) — 4 bus bars | | | | | | |
| Max-power | 300 | 305 | 310 | 315 | 320 | 325 | 330 |
| Power Tolerance | 0 to +6W | | | | | | |
| Voltage at Pmax (Vmp) | 36.7 | 36.8 | 36.9 | 37.0 | 37.1 | 37.2 | 37.3 |
| Current at Pmax (Imp) | 8.17 | 8.29 | 8.40 | 8.51 | 8.63 | 8.74 | 8.84 |
| Open-Circuit Voltage (Voc) | 45.0 | 45.1 | 45.2 | 45.3 | 45.4 | 45.5 | 45.6 |
| Short-Circuit Current (Isc) | 8.79 | 8.97 | 9.09 | 9.21 | 9.33 | 9.46 | 9.55 |
| Max-System Voltage (VDC) | 1000V(IEC), 600V(UL) | | | | | | |
| Cell Efficiency | 17.3 | 17.6 | 17.9 | 18.2 | 18.5 | 18.8 | 19.0 |
| Module Efficiency | 15.5 | 15.7 | 16.0 | 16.3 | 16.5 | 16.8 | 17.0 |
| No. of Bypass Diodes (pcs.) | 3 | | | | | | |
| Max. Series Fuse (A) | 15A | | | | | | |
| Temperature Coefficient of Pmax | -0.45%/°C | | | | | | |
| Temperature Coefficient of Voc | -0.34%/°C | | | | | | |
| Temperature Coefficient of Isc | 0.05%/°C | | | | | | |
| Nominal Operating Cell Temperature | 45±2 °C | | | | | | |

Mechanical Characteristics

| | |
|---------------------------------|---|
| Cable type, Diameter and Length | Φ=4mm2, L=1000±5mm |
| Type of Connector | Compatible type MC4 |
| Dimension A×B×C | 1956×992×50/45mm |
| Weight | 22.5/21kg |
| No. of Draining Holes In Frame | 16 |
| Construction | Glass: High Transmission, Low Iron, Tempered Glass 3.2mm Encapsulation: EVA Back side: White |
| Junction Box | IP67 Rated |
| Frame | Clear anodized aluminum alloy type 6063T5 frame |

Qualification Test Parameters

| | |
|-------------------------------|-----------------------------------|
| Dielectric Insulation Voltage | 6000VDC max |
| Operating Temperature | -40°C ~ +85°C |
| Max load | 5400Pa |
| Hailstone impact | 25mm (1inch) at 23m/s (52mph) |
| Fire rating | Class C |

Packaging Configuration 1956×992×50mm

| | |
|-------------------------|-------------------------|
| Packaging Configuration | 20pcs/box and 2pcs/box |
| Loading Capacity | 484pcs/40HQ 190pcs/20GP |

Packaging Configuration 1956×992×45mm

| | |
|-------------------------|-------------------------|
| Packaging Configuration | 22pcs/box and 2pcs/box |
| Loading Capacity | 528pcs/40HQ 240pcs/20GP |