CSG PVTECH CO.,LTD.

CSGzzzM2 (zzz=140W-160W)

Reputations

Top 10 of Most Competitive Chinese Public Listed Companies.
Top 10 of World's Biggest Glass Makers by PLIMSOLL.
CCTV Finance & Economics 50 Indexes Listed Company.
Top 500 of Asian Brand Assessment System.

25 Years

We are a full member of PV Cycle Association. This association has established a voluntary take-back and recycling program for end-of-life solar modules in 25 years.

PV Chain

30 years manufacturing experience.A complete solar PV industrial chain, covering poly-silicon, ingot, wafer, solar glass, solar cell and solar module. Manufacturing with standard ISO 9001:2008&ISO 14001:2004 to ensure CSG's solar modules with excellent raw materials and exquisite process.

Really Green

Utilizing green power of Three Gorges Dam in Yangzi river instead of coal ,with the first closed-loop polysilicon plant, CSG devotes to making green energy by green energy.

5400Pa

Modules certified by TUV and ETL testing organization in the extreme conditions (temperature, load & impact) with good performance.

Weak Light

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

0 /+6W

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

100%

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

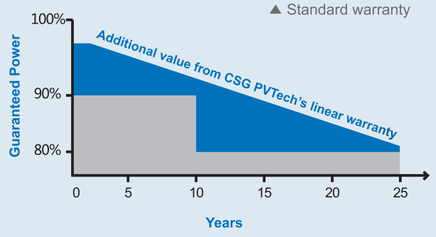
TÜV

Pass the Salt-mist Corrosion Test, Fire test,Ammonia Resistance Test, Potential Induced Degradation(PID) Test and Carbon Footprint assessment in TUV.

High Efficiency
Polycrystalline Solar Module

▲ CSG PVTech's linear performance warranty

▲ Standard warranty



■ 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% in the first year, thereafter 0.67% per year,ending with 82% in the 25th year after the Warranty Start Date.
2. For Monocrystalline Products: 3 % in the first year, thereafter 0.67% per year, ending with 81% in the 25th year after the Warranty Start Date.

The Warranty Start Date shall be defined as the date of the Bill of Lading date.

Version 8.0 2013

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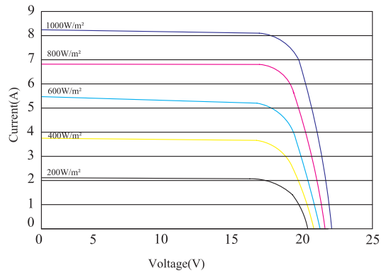
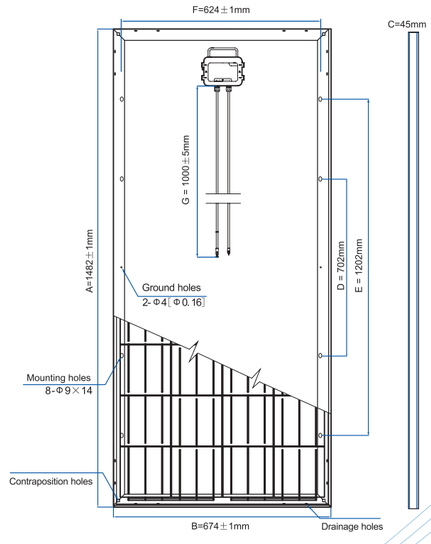
I-V Curves

I-V Curves of PV module CSG 140W at different light power



Dimensions



Typical Electrical Characteristics

Solar cells:	Poly- Crystalline 156X156mm 36pcs.(4×9) —3 bus bars				
Max-power	140Wp	145Wp	150Wp	155Wp	160Wp
Power Tolerance	0 to +6W				
Voltage at Pmax (Vmp)	18.1V	18.2V	18.4V	18.6V	18.8V
Current at Pmax (Imp)	7.73A	7.95A	8.15A	8.34A	8.51A
Open-Circuit Voltage (Voc)	22.2V	22.4V	22.5V	22.7V	22.9V
Short-Circuit Current (Isc)	8.30A	8.46A	8.82A	9.02A	9.21A
Max-System Voltage (VDC)	1000V(IEC), 600V(UL)				
Cell Efficiency	16.2%	16.8%	17.3%	17.9%	18.5%
Module Efficiency	14.0%	14.5%	15.0%	15.5%	16.0%
No. of Bypass Diodes (pcs.)	2				
Max. Series Fuse (A)	12A				
Temperature Coefficient of Pmax	-0.45%/℃				
Temperature Coefficient of Voc	-0.34%/℃				
Temperature Coefficient of Isc	0.05%/℃				
Nominal Operating Cell Temperature	45±2℃				

***STC Conditions** (1000W/m²; 1.5 AM and 25℃ Cell temperature)

Mechanical Characteristics

Cable type,Cross-sectional area and Length	Φ=4mm², L=1000±5mm
Type of Connector	Compatible type MC4
Dimension A×B×C	1482×674×45mm (58.35×26.54×1.77 inch)
Weight	13.0kg (28.6lb)
No. of Draining Holes In Frame	16
Construction	Glass: High Transmission, Low Iron, Tempered Glass 3.2mm Encapsulation: EVA Back side: White
Junction Box (protection degree)	IP 67
Frame	Clear anodized aluminum alloy type 6063T5 frame

Qualification Test Parameters

Dielectric Insulation Voltage	6000V DC max
Operating Temperature	-40℃ to +85℃
Max load	5400Pa
Hailstone impact	25mm (1inch) at 23m/s (52mph)
Tire safety class	Class C

Packaging Configuration

Packaging Configuration	22pcs./box	
Quantity of Big Box/Pallet	1box/pallet	1box/pallet
Loading Capacity	616pcs./40'GP	308pcs./20'GP

▶ Caution: Read Safety And Installation Instructions Before Using This Product

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