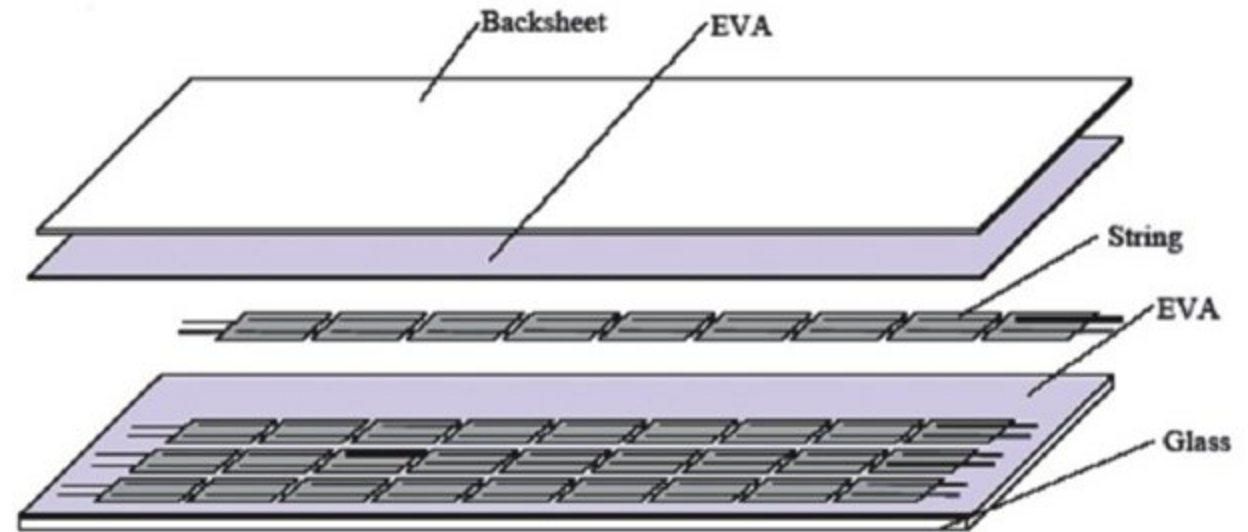


We focus on precise production and provide Customer with best cost-effective products to create Market Value for Customer

CHN 54M 230W/235W/240W/245W/250W



Power tolerance (0~+3%) to ensure the high reliability of power output



Modules certified by TUV to with stand high level of wind loads (2400 Pa) and snow loads(5400 Pa)



Special PV Module Insurances by world leading insurance company guarantees the benefit of PV investors and PV module users



Junction box and bypass diodes guarantee the modules free of overheating and "hot spot effect"

Guaranteed Performance**

10 Years Manufacturing Warranty

12 Years Warranty
90% Power Output

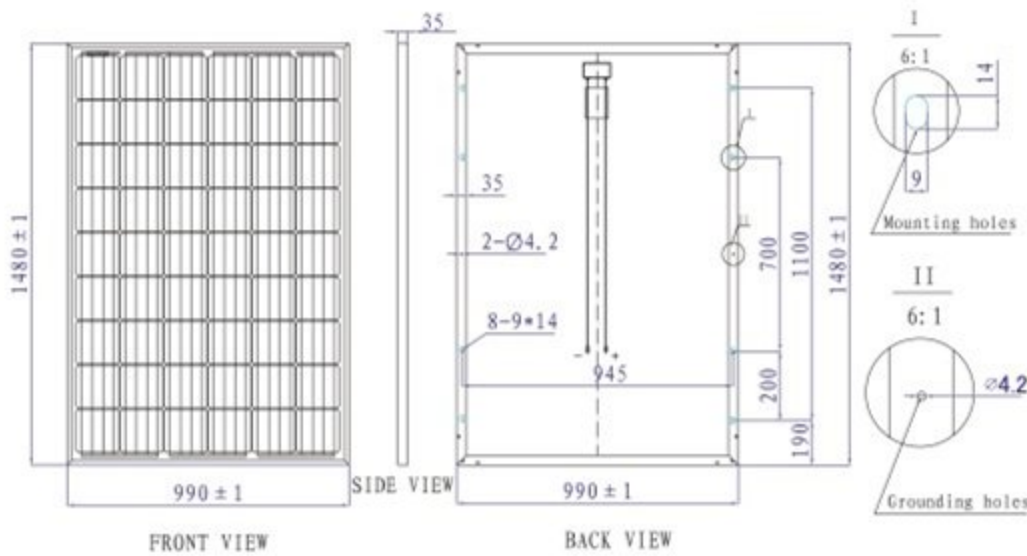
25 Years Warranty
80% Power Output

Free module recycling through membership in the Ceres Cycle Association

choosing chinaland solar

- The most vertically integrated solar manufacturer in the industry with production of ingots, wafer, solar cells and modules using both mono crystalline and multi crystalline technology.
- Global distribution with local warehousing, delivery and after sales services.
- Modules certified by global testing facilities: IEC61215, IEC61730, CE, ROHS.
- Manufacturing with international quality standards and environment management system: ISO9001 and ISO14001.
- Most updated design with drainage holes in the frame ensures the modules to withstand various weather conditions.
- Minimal wiring effort required as the module has high reverse current resistance.

MECHANICAL DRAWINGS



MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline 156x156mm
Number of cells	54(6x9)
Dimensions(AxBxC)	1480x990x35mm
Weights	17.5kg
Front Glass	3.2mm tempered low iron glass
Frame	Clear anodized aluminum alloy
Junction Box	IP67, with bypass diodes
Connector	MC4 compatible
Output Cables	TUV, ±length 900mm, 4.0mm ²

ELECTRICAL CHARACTERISTICS

Maximum Power at STC(Pmax)	230W	235W	240W	245W	250W
Short Circuit Current(Isc)	8.85A	8.95A	9.01A	9.14A	9.23A
Open Circuit Voltage(Voc)	33.80V	34.10V	34.60V	34.90V	35.3V
Maximum Power Current(Imp)	8.32A	8.40A	8.48A	8.58A	8.71A
Maximum Power Voltage(Vmpp)	27.60V	27.90V	28.30V	28.50V	28.7V
Module Efficiency	15.70%	16.04%	16.38%	16.72%	17.06%
Power Tolerance	0~+3%	0~+3%	0~+3%	0~+3%	0~+3%



irradiance 1000W/m²



Module temperature 25 °C



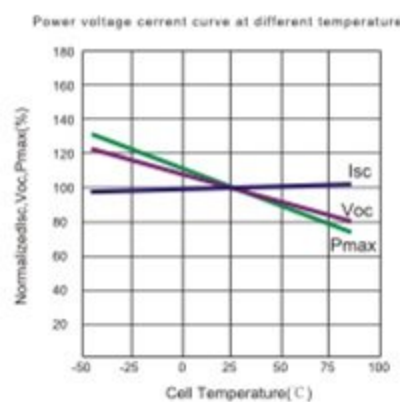
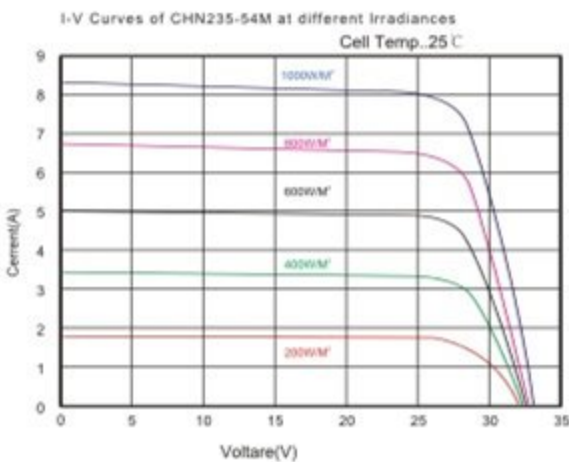
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TEMPERATURE CHARACTERISTICS

Norminal Operating Cell Temperature (NOCT)	45 °C ±2 °C
Temperature Coefficient of Pmax	-0.44% / °C
Temperature Coefficient of Voc	-0.34% / °C
Temperature Coefficient of Isc	0.06% / °C

PACKING CONFIGURATION

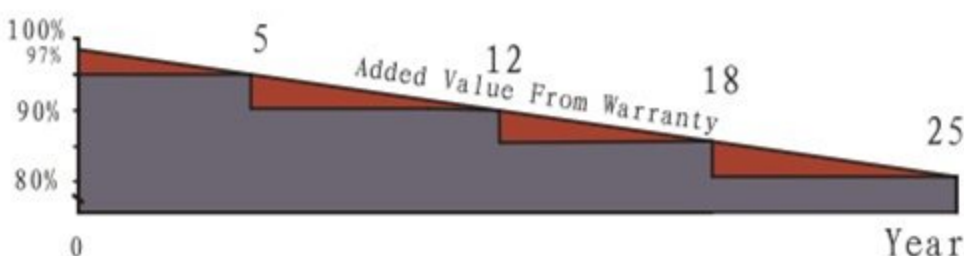
Container	20'GP	40'GP
Pieces per pallet	30	30
Pallets per container	14	30
Pieces per container	420	900



SYSTEM INTEGRATION PARAMETERS

Maximum system voltage	VDC 1000V
Maximum Series Fuse	15A
Increased snowload acc. to IEC 61215	5400Pa
Operating Temperature	-40to+85 °C
Number of bypass diodes	3

INDUSTRY-LEADING WARRANTY BASED ON NOMINAL POWER



QUALIFICATIONS AND CERTIFICATES



- Based on nominal power(pnom)
- 25-year transferrable power output warranty: 5 years/95%, 12 years/90% 18 years/85%, 25 years/80%
- 10-year material and workmanship