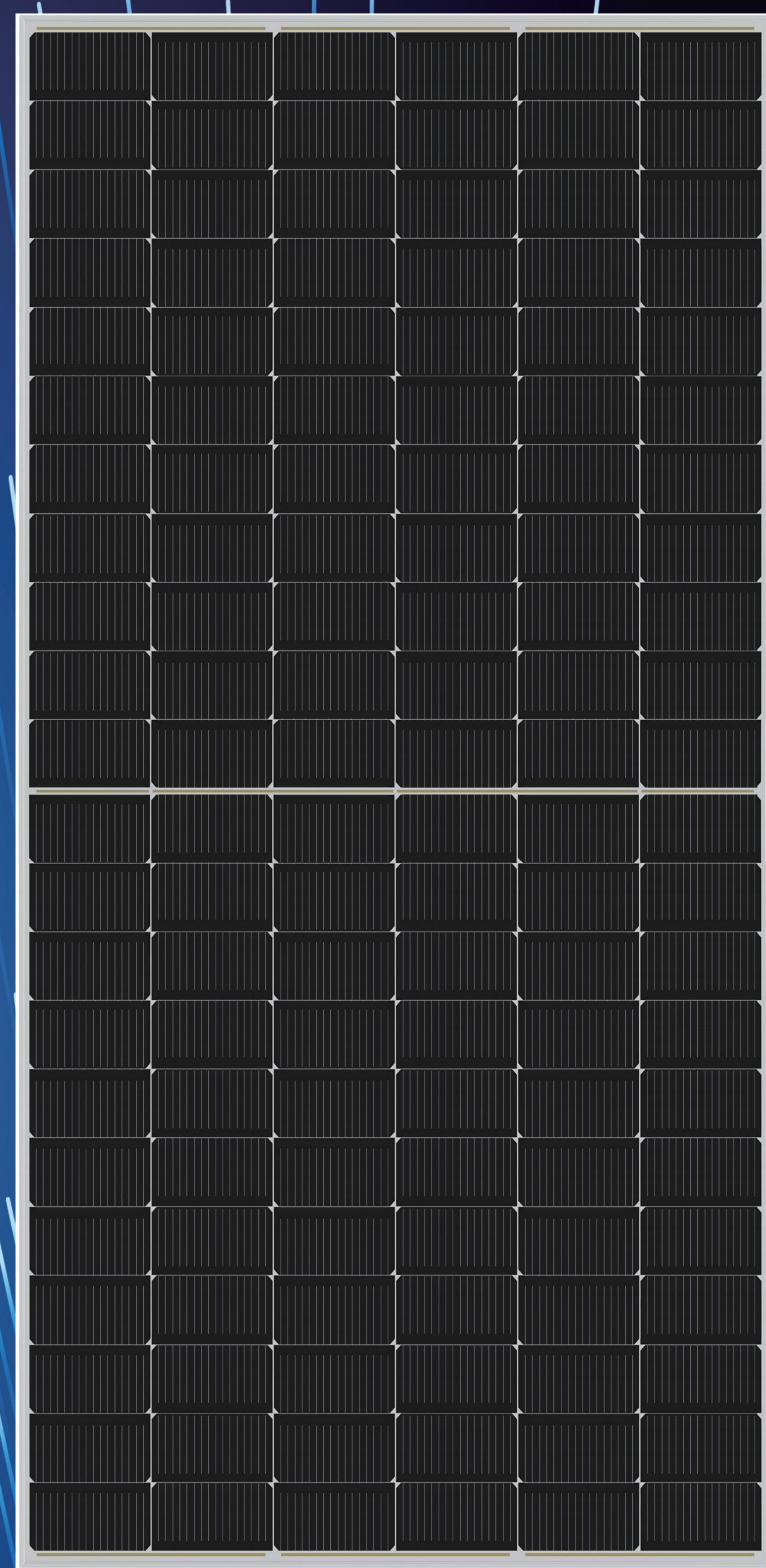


M10R-MBB TOPCon Mono Bifacial Module

(132Half Cells)

12 years Product warranty 30 years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964



590-610W /Output power

22.6% /Maximum efficiency

0~+5W /Power tolerance

Comprehensive product certification

- IEC TS 62941 (PV quality Management System)
- ISO9001: 2015 (Quality Management System)
- ISO14001 (Environmental Management System)
- OHSAS18001 (Occupational Health and Safety Management System)



PID Resistant

Strict selection of encapsulation materials eliminates PID risk.



Low BOS

Rectangular technology, "low voltage" and "high current" features drive a 3%+ reduction in system BOS costs



High Returns

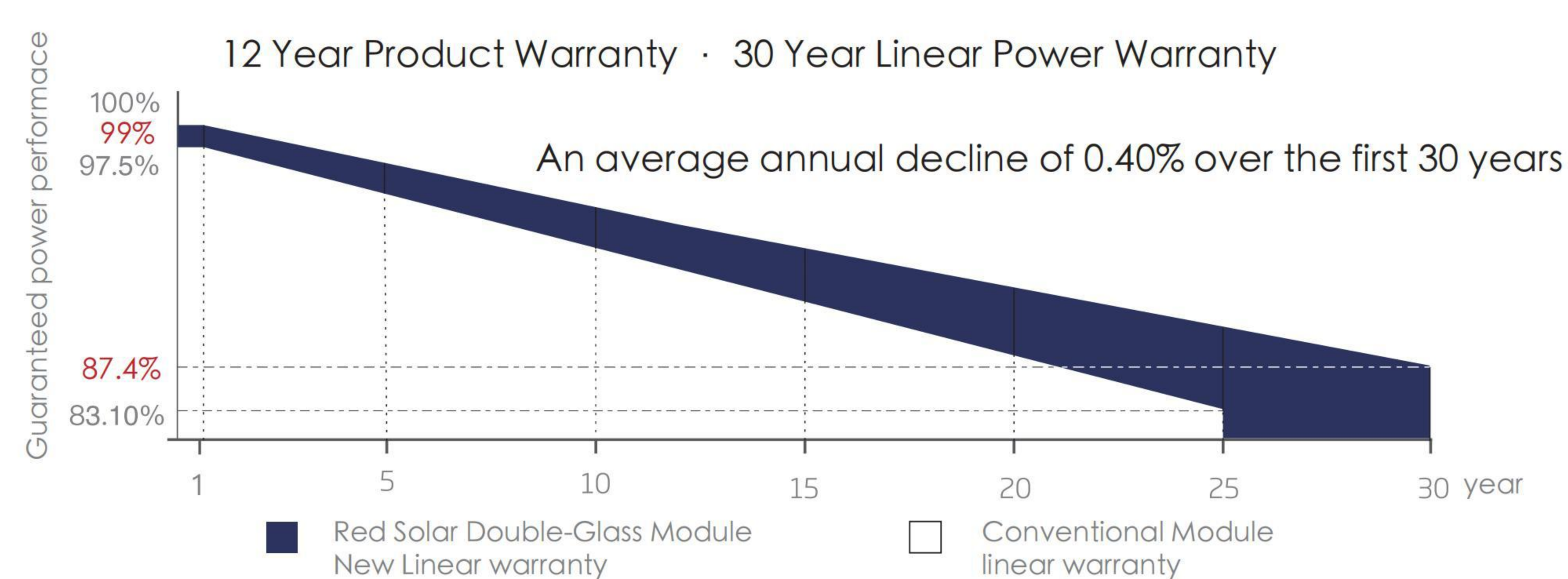
The n-type module has lower annual attenuation, better photoelectric conversion efficiency and temperature coefficient benefit, bifaciality can reach 80%.



SMMB Technology

SMMB Superfine main gate technology for better light utilization and current collection energy. Improve product power output and reliability.

Excellent Power Guarantee



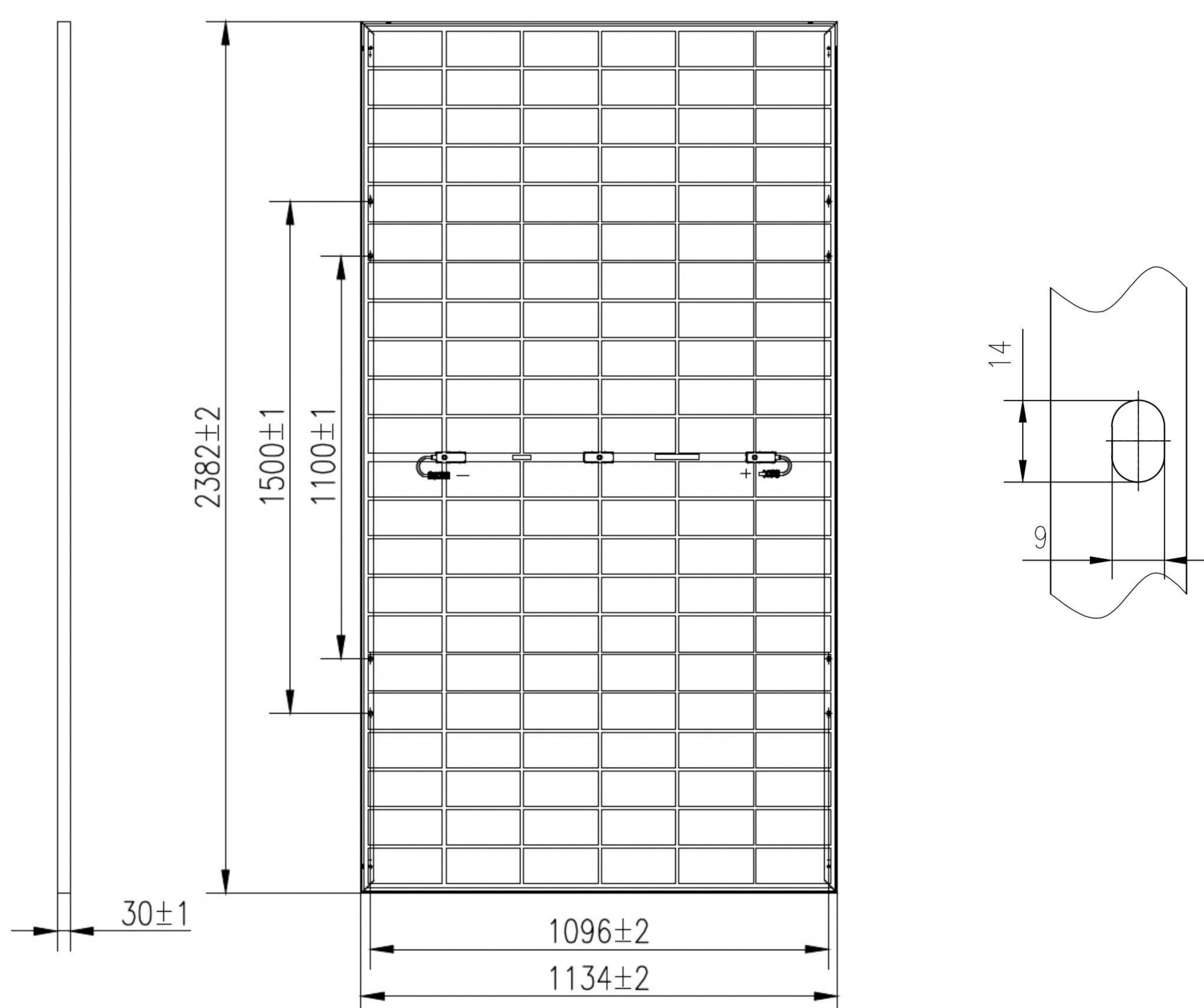
Model of PV Module

CETC-xxxTR(GDF)/132

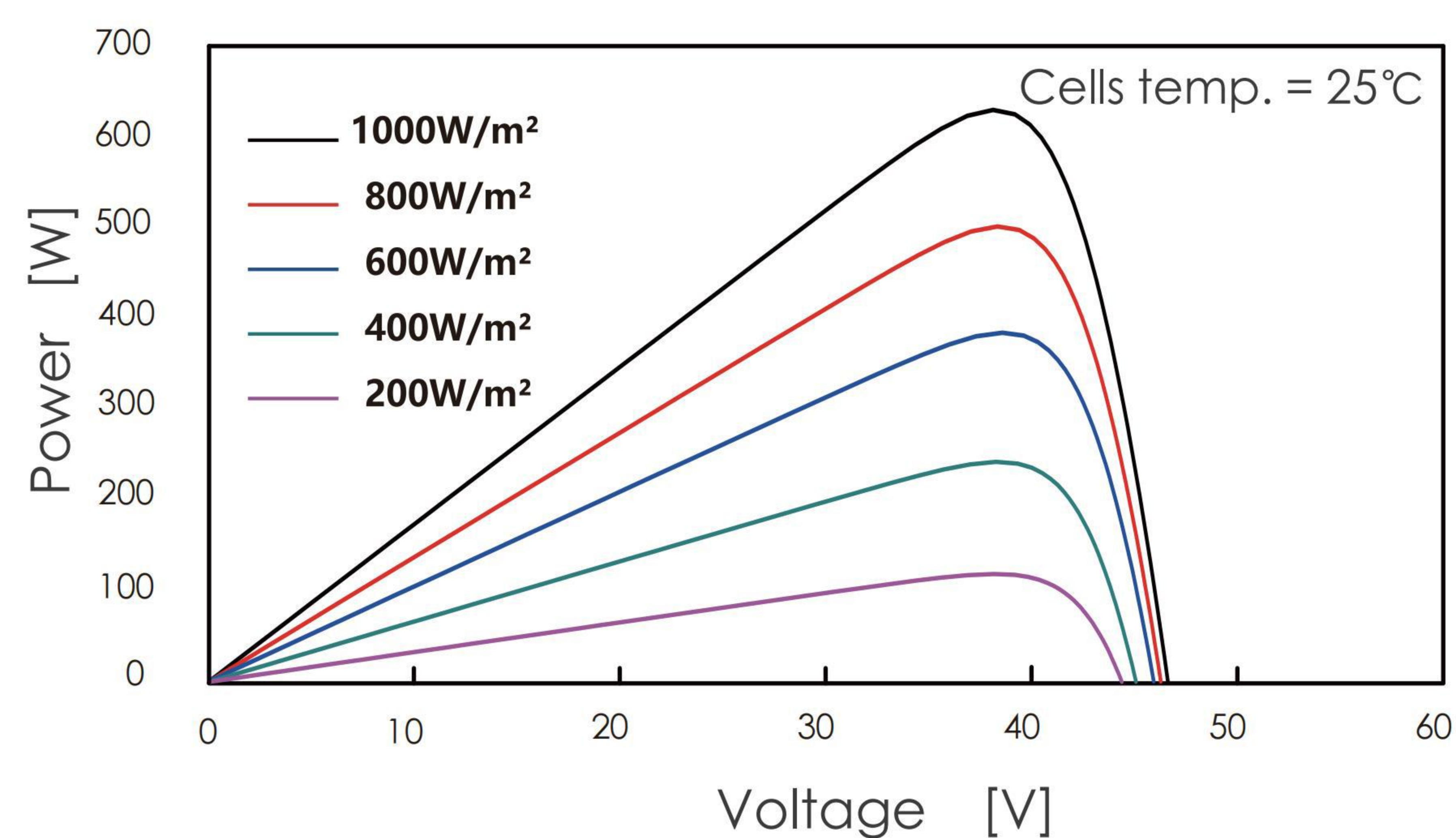
Power Range

590-610W

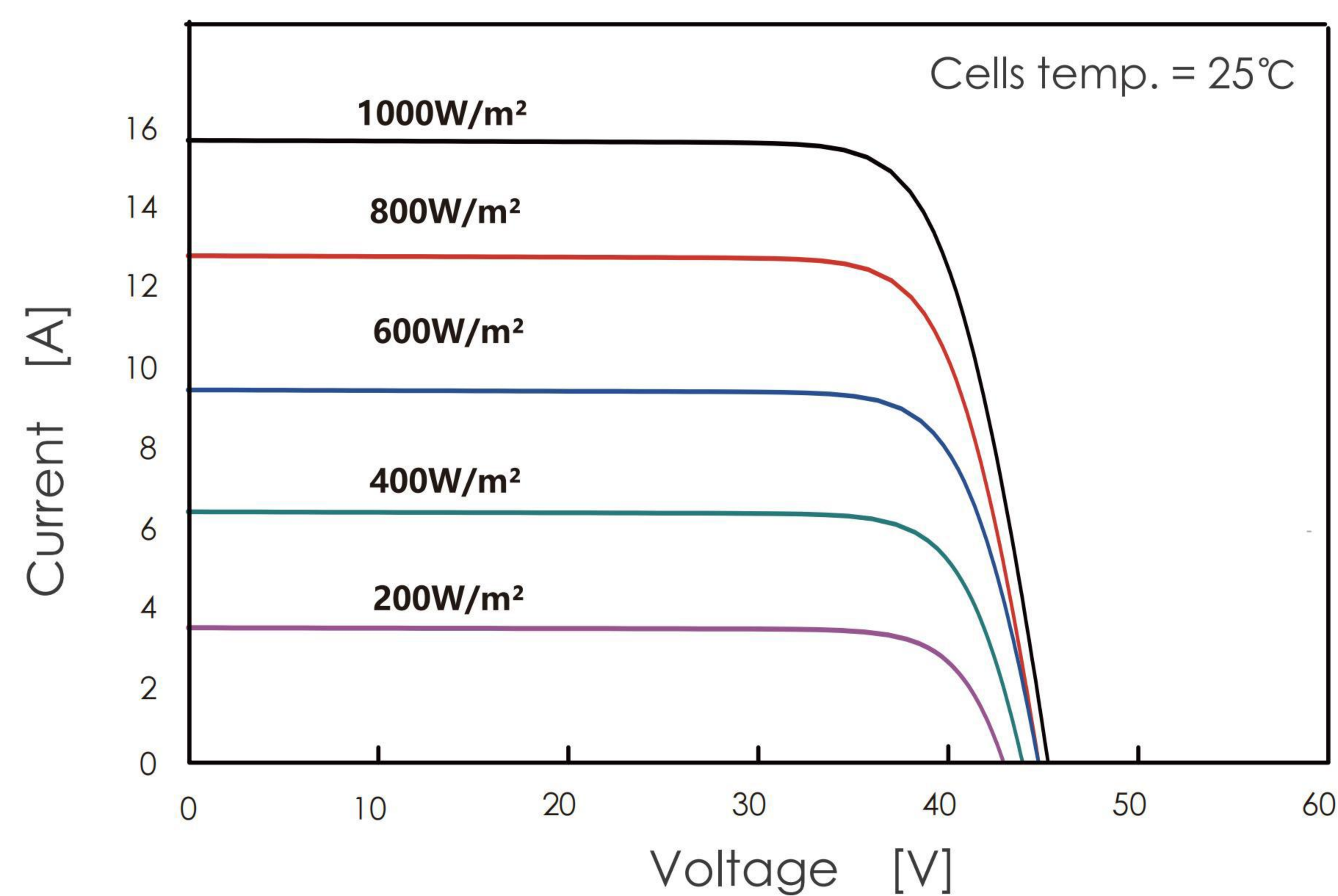
PV module dimensions (mm)



P-V Curves of PV Module



I-V Curves of PV Module



Electrical Parameter(STC)

Model	590M	595M	600M	605M	610M
Maximum power (W)	590	595	600	605	610
Working point voltage (V)	39.86	39.99	40.11	40.23	40.34
Working point current (A)	14.8	14.88	14.96	15.04	15.12
Open circuit voltage (V)	46.73	46.98	47.23	46.73	46.98
Short circuit current (A)	15.63	15.71	15.79	15.87	15.95
PV module efficiency	21.84%	22.03%	22.21%	22.40%	22.58%
Standard test conditions	Atmospheric quality Am1.5, Irradiance 1000w/m², Cell Temperature 25°C				

RearSide Power gain

	Maximum Power	619.5Wp	624.8Wp	630.0Wp	635.3Wp	640.5Wp
5%	Efficiency STC	22.93%	23.13%	23.32%	23.52%	23.71%
	Maximum Power	678.5Wp	684.3Wp	690.0Wp	695.8Wp	701.5Wp
15%	Efficiency STC	25.12%	25.33%	25.54%	25.76%	25.97%
	Maximum Power	737.5Wp	743.8Wp	750Wp	756.3Wp	762.5Wp
25%	Efficiency STC	27.30%	27.53%	27.77%	28.00%	28.23%

The Electrical performance parameters are neither just referred to one PV panel, nor are a part of the contract; They are only used as reference.

Mechanical Parameters

Module size	2382*1134*30mm
Number of solar cells	132Cells (2*6*11)
Weight	32.5Kg ± 5%
Junction Box	IP68, 3 diodes
Cables	4mm², +:300mm/-:200mm, (Customizable)
Front plate glass	2.0mm,Ultra white AR coated semi-toughened glass
Rear plate glass	2.0mm, semi-toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Packaging&Transport

40'HQ container transport 36 Pcs/box × 20box = 720 Pcs

Temperature Parameter Maximum Ratings

NMOT	42±2°C	Working temperature	-40~+85°C
Temperature coefficient of maximum power(Pmax)	-0.30%/°C	Maximum system voltage	1500VDC
Temperature coefficient of open circuit voltage(Voc)	-0.25%/°C	Maximum fuse rated current	30A
Temperature coefficient of short circuit current(Isc)	+0.045%/°C		

