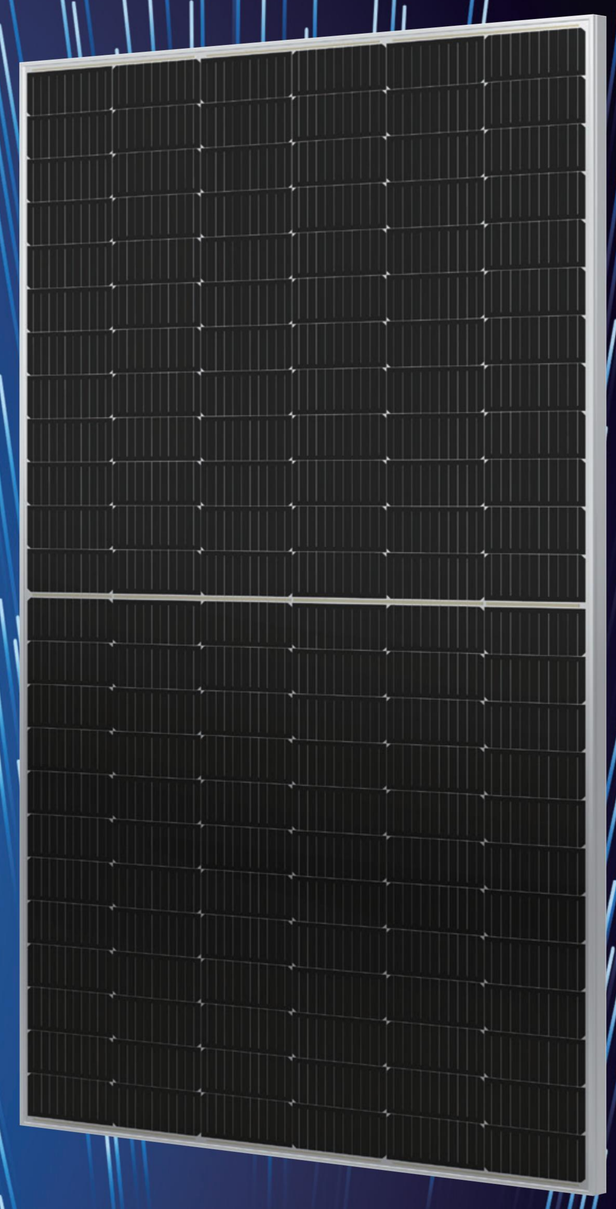
REDSOLAR

M10-MBB Mono Module

144 Half Cells

Sliver frame or black frame



12 years Product warranty

25 years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964

540-560W /Output power

21.70% /Maximum efficiency

0~+5W /Power tolerance

Comprehensive product certification

- IEC 61215 IEC61730
- IEC TS 62804 (PID Resistant)
- IEC 62716 (Ammonia Corrosion)
- IEC 61701 (Salt Spray Corrosion)
- 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 Guarantee

Strict selection of encapsulation materials eliminates PID risk.

Severe Weather Resilience

Verified by TUV NORD test, Passed IEC 61701 salt spray corrosion(grade 6), IEC62716 ammonia corrosion test certification.

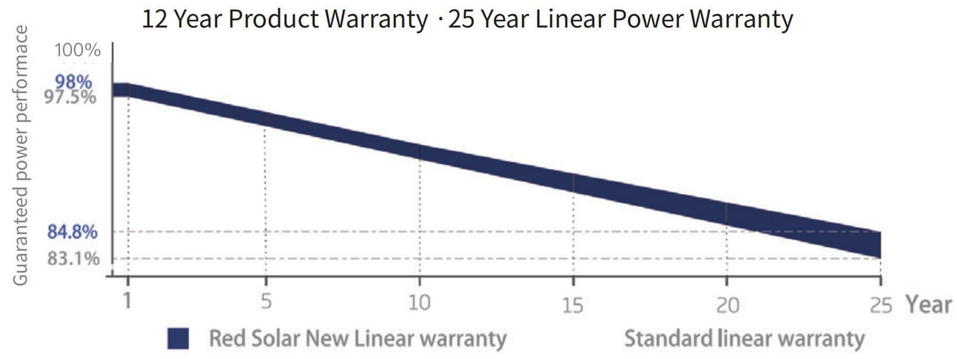
Hot-spot Resistance

Lower internal current and power to effectively reduce hot-spot heating.

Technical Superposition

Can integrate a variety of high efficiency new technology of solar cell, superposition technology gain.

Excellent Power Guarantee



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REDSOLAR

M10-MBB Mono Module

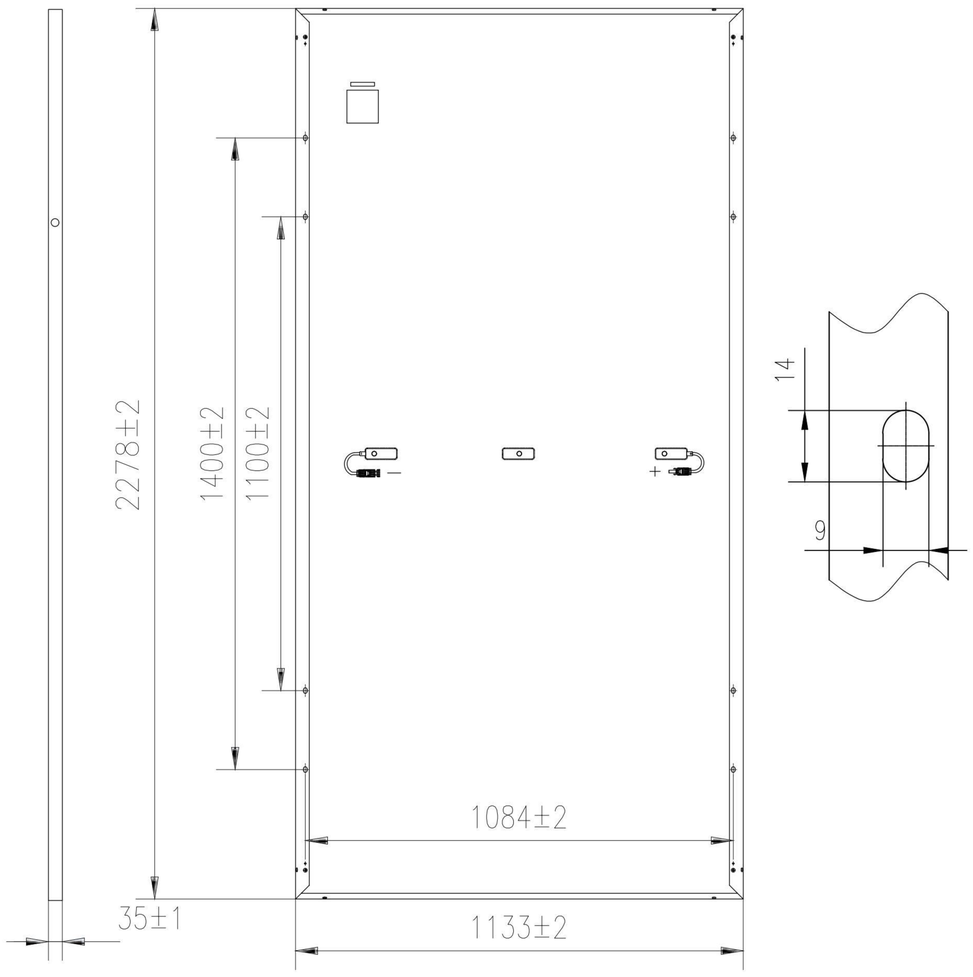
Model of PV Module

CETC-xxxM(H)/144

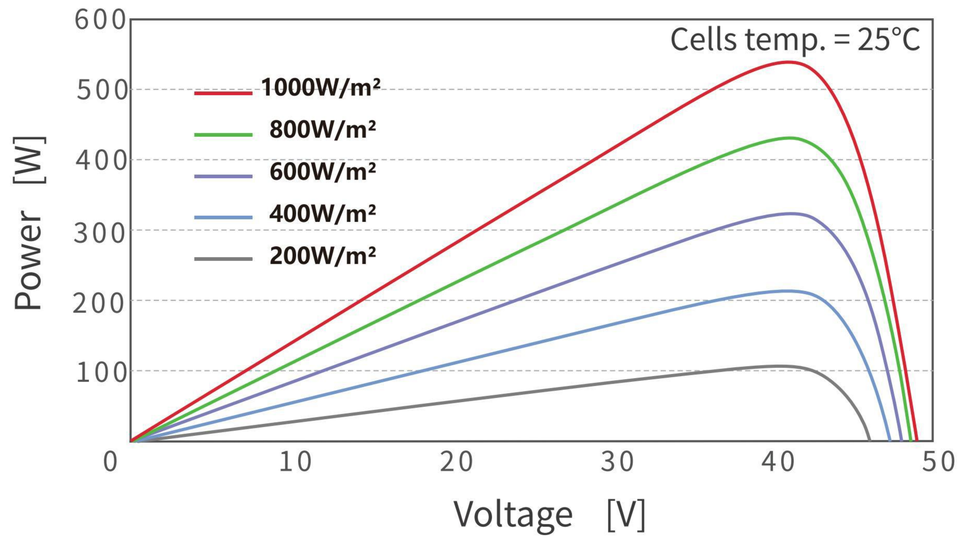
Power Range

540-560W

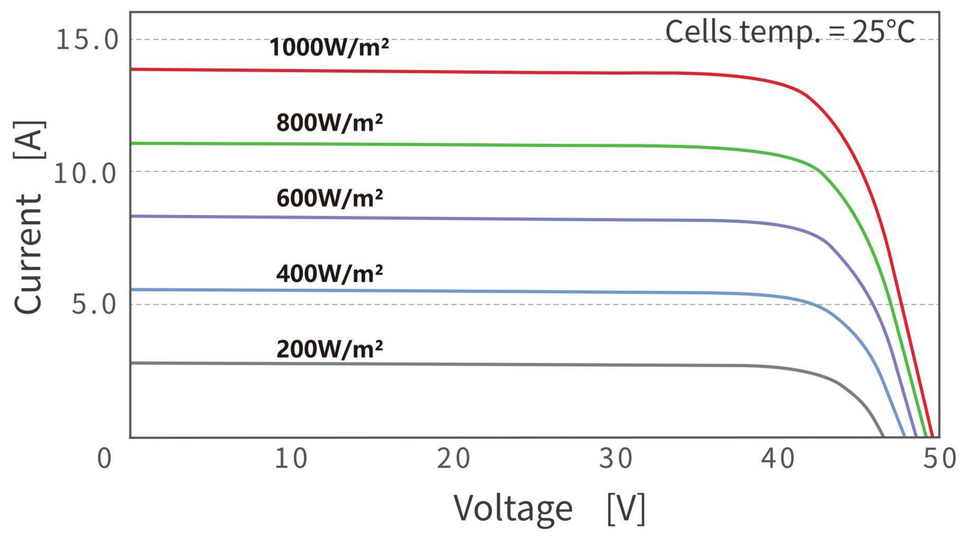
PV module dimensions (mm)



P-V Curves of PV Module



I-V Curves of PV Module



Electrical Parameter(STC)

Model	540M	545M	550M	555M	560M
Maximum power（W）	540	545	550	555	560
Working point voltage（V）	41.63	41.79	41.95	42.10	42.33
Working point current（A）	12.97	13.04	13.11	13.18	13.23
Open circuit voltage（V）	49.50	49.65	49.80	49.95	50.10
Short circuit current（A）	13.85	13.92	13.98	14.05	14.12
PV module efficiency	20.92%	21.12%	21.31%	21.50%	21.70%
Standard test conditions	AM1.5, Irradiance 1000w/㎡, Cell Temperature 25°C				

Electrical Parameter(NMOT)

Model	540M	545M	550M	555M	560M
Maximum power（W）	402	405	409	413	417
Working point voltage（V）	38.25	38.39	38.57	38.71	38.99
Working point current（A）	10.52	10.57	10.62	10.67	10.72
Open circuit voltage（V）	46.10	46.20	46.40	46.60	46.80
Short circuit current（A）	11.19	11.24	11.29	11.34	11.39
NMOT	The irradiance is 800W/m², the ambient temperature is 20 degrees, and the wind speed is 1m/s				

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	2278*1133*35mm
Number of solar cells	144Cells (2*6*12)
Weight	27.3Kg ±5%
Junction Box	IP68, 3 diodes
Cables	4mm², 300mm, (Customizable)
Front plate glass	Ultra white AR coated toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

Packaging&Transport

40'HQ container transport	31Pcs/box × 20 box = 620 Pcs

Temperature Parameter

NMOT	45±2°C
Temperature coefficient of maximum power(Pmax)	-0.35%/°C
Temperature coefficient of open circuit voltage(Voc)	-0.28%/°C
Temperature coefficient of short circuit current(Isc)	+0.048%/°C

Maximum Ratings

Working temperature	-40~+85°C
Maximum system voltage	1500VDC
Maximum fuse rated current	25A