

Shingled monofacial module



Features of Module



Shingling Technology
Innovative structure, low-temperature adhesive bonding, high-density layout.



Beautiful Appearance
Uniform layout, better aesthetic.



Superior Safety and Reliability
No hidden welding crack, low operating temperature, high pressure resistance.



Low System Cost
High module efficiency, reducing system cost.



Low Hot Spot Risk
Parallel circuit design reduces shading loss.



Low Shading Loss
Full parallel arrangement brings high effective power generation hours.

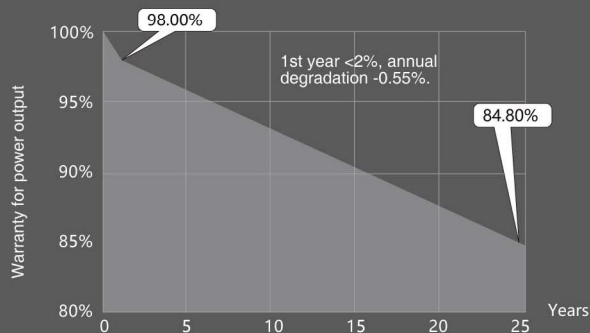


Eco-friendly
Adhering to green philosophy, no fluorine and low lead.

Linear Power Output Warranty

15 15-year warranty for materials.

25 25-year warranty for linear power output.



Quality Management System and Product Certification

IEC61215/61730, IEC62804(PID), IEC61701(Salt),
IEC62716 (Ammonia), IEC60068-2-68(Sand)
ISO 9001:2015 / quality management system
ISO 14001:2015 / environmental management system
ISO 45001:2018 / occupation health safety management system
ISO 50001:2011 / energy management system
IEC TS 62941—2016 / PV industry quality management system



Electrical Characteristics (STC)

Module type:	490	485	480	475	470
Maximum power - Pm (W)	490	485	480	475	470
Open circuit voltage - Voc (V)	46.7	46.6	46.6	46.5	46.4
Short circuit current Isc (A)	13.28	13.22	13.16	13.10	13.04
Voltage at maximum power point - Vm (V)	38.9	38.8	38.8	38.7	38.6
Current at maximum power point - Im (A)	12.60	12.50	12.37	12.27	12.18
Module efficiency -η (%)	20.9	20.7	20.5	20.3	20.1

Electrical Characteristics (NMOT)

Maximum power - Pm (W)	369	365	361	358	354
Open circuit voltage - Voc (V)	44.5	44.4	44.4	44.3	44.2
Short circuit current Isc (A)	10.72	10.67	10.62	10.57	10.52
Voltage at maximum power point - Vm (V)	37.1	37.0	37.0	36.9	36.8
Current at maximum power point - Im (A)	9.95	9.87	9.77	9.69	9.62

* STC: Irradiation 1000W/m²; AM1.5; environmental temperature 25°C; tested according to EN 60904-3;
* NMOT: irradiation 800W/m²; wind speed 1m/s; environmental temperature 20°C;
* Pm tolerance: 0~+5W ; power test uncertainty: ±3%; Voc[V], Isc[A], Vm[V] and Im[A] test tolerance: ±3%

Mechanical Parameters

Size	2056×1140×35mm (L×W×H)
Weight	25.0kg
Front glass	3.2mm toughened glass
Cell	Monocrystalline PERC 166×166mm
Backplate	High weather resistance
Frame	Anodic alumina profile
Junction box	IP68, TUV, 2 diodes
Cable	1200mm long, 4mm² cross section, customizable
Connector	MC4 compatible / original EVO2
Packaging mode	31pcs/pallet; 682pcs/40'HQ; 992pcs/truck

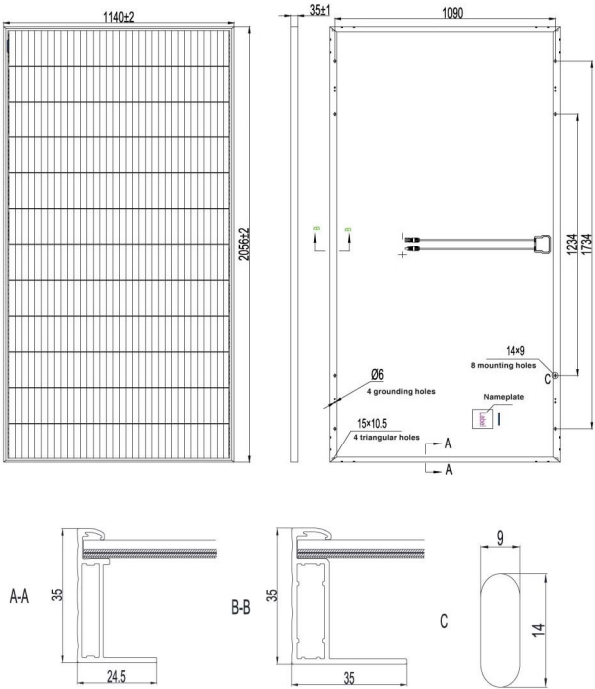
Temperature Parameters

NMOT	42.30 °C (±2°C)
Open circuit voltage temperature coefficient	-0.27%/°C
Short circuit current temperature coefficient	+0.04%/°C
Maximum power temperature coefficient	-0.34%/°C

Maximum Rated Parameters

Maximum system voltage (V)	DC1500/1000 (IEC)
Maximum fuse rated current (A)	20
Maximum front static load (Pa)	5400
Working temperature (°C)	-40~+ 85
Hail resistance	Maximum diameter 25mm, impact speed 23m/s

Drawings



I-V Curve

