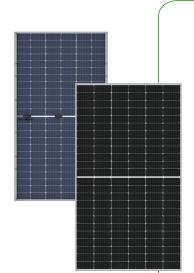
MONO

144 Half Cells



V166 series, bifacial module



Features



High PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID



High module efficiency

Advanced module technology delivers superior module efficiency



Current sorting process

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage



Positive tolerance

Positive tolerance of up to 5W delivers higher output reliablity



Extended wind and snow load tests

Module certified to withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal) *



High system voltage Compatible

Maximum 1500VDC system voltage saves total system cost

Certifications and standards: IEC 61215, IEC 61730, conformity to CE













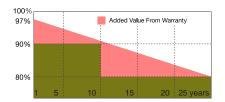




- Chinayard Co.,LTD designs, manufactures and delivers high efficient solar modules to the world.
- Founded in 2009, Chinayard is well known for its advanced technology, reliable product quality, and excellent customer service.
- As one of leading PV enterprises, Chinayard has delivered more than 2.0G of solar products to residential, commercial, utility and off-grid projects all around the world.

Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



Chinayard distributor





Electrical characteristics at Standard Test Conditions(STC)

	CYC-V166-					
Model	MF144-445M	MF144-450M	MF144-455M	MF144-460M		
Maximum Power(Pm)	445Wp	450Wp	455Wp	460Wp		
Cell type	Mono	Mono	Mono	Mono		
Optimum Operating Current(Imp)	10.82A	10.89A	10.96A	11.03A		
Short Circuit Current (Isc)	11.58A	11.66A	11.73A	11.80A		
Optimum Operating Voltage(V)	41.09V	41.29V	41.49V	41.69V		
Open Circuit Voltage(Voc)	48.85V	49.08V	49.32V	49.56V		
Maximum System Voltage		150	00V			
Module efficiency	20.47%	20.70%	20.93%	21.16%		
Standard Test Conditions (STC): Irradiance 1,000 W/m²; AM 1,5; module temperature 25°C.						

Standard Test Conditions (STC): Irradiance 1,000 W/m²; AM 1,5; module temperature 25°C Measuring uncertainty of power: ±3%.

Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics With Different Rear Side Power Gain (Reference to 450W Front)

Backside Power Gain	5%	10%	15%	20%	25%
Maximum Power(Pm)	473	495	518	540	563
Optimum Operating Current(Imp)	11.44A	11.98A	12.53A	13.07A	13.61A
Short Circuit Current (Isc)	11.95A	12.58A	13.21A	13.88A	14.50A
Optimum Operating Voltage(V)	41.29V	41.29V	41.3V	41.3V	41.3V
Open Circuit Voltage(Voc)	49.75V	49.75V	49.76V	49.76V	49.76V

Temperature Characteristics

Nominal Operating Cell Temperatu 45±2°C

Temperature Coefficient of Pmax -0.42%/°C

Temperature Coefficient of Voc -0.32%/°C

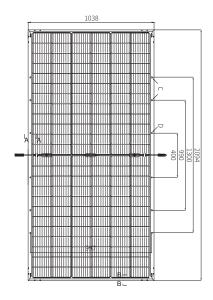
Temperature Coefficient of ISC +0.05%/°C

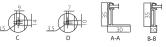
Material Characteristics

Dimension	2094*1038*35mm
Weight	Appro 27.5kgs
Cells (quantity/material)	144 pieces solar cells
Junction Box	IP68, 3 diodes
Cable&Connector	4mm², +400mm,-200mm Length can be customized

Packaging 31pcs/pallet,155pcs/20GP,682pcs/40HC

Dimensions and Structure





Units: mm

Chinayard distributor

* elSOL