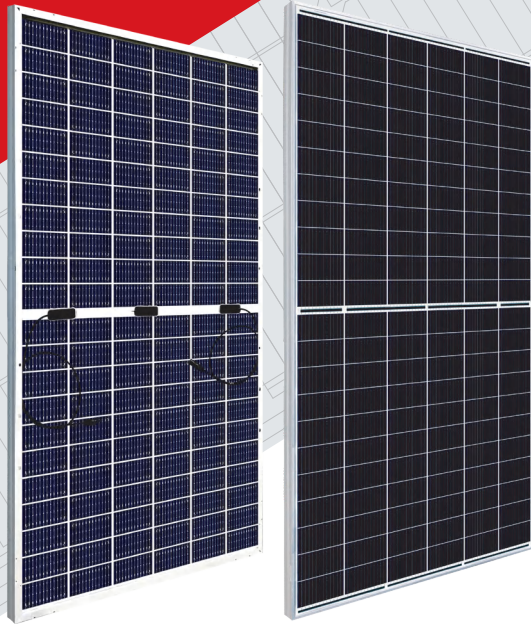


Mars Series

660W/665W/670W/675W

SUN 66MD-H12S

**HALF-CELL BIFACIAL MBB MONO
PERC DOUBLE GLASS MODULE
210MM CELLS**



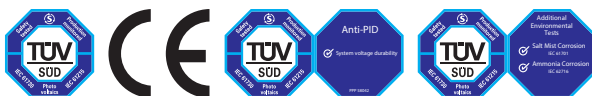
BACK VIEW

FRONT VIEW

SUNERGY USA WORKS LLC

Founded in 2008, Sunergy is a manufacturer of high-performance photovoltaic products. With 12 manufacturing bases and more than 20 branches around the world, the company's business covers modules, photovoltaic power stations and EPC. Sunergy products are available in over 120 countries and regions and are used extensively in ground-mounted power plants, commercial & industrial rooftop PV systems and residential rooftop PV systems.

QUALIFICATIONS AND CERTIFICATES



COMPREHENSIVE CERTIFICATES

IEC61215 / IEC61730 / IEC61701 / IEC62716 / IEC62804
ISO 9001: 2015 Quality management systems;
ISO 14001: 2015 Environmental management systems;
ISO 45001: 2018 Occupational health and safety management systems;

Sunergy Advantages



Power attenuation rate surpass than industry standards

As the CTC randomization test, our attenuation rate is 1.81%, 0.31% and 0.34% in the 1st, 2nd and 3rd year, which is much less than the national standard value of 2% and 0.45%



Overflow tank can be waterproof

The excess silicone will flow into the overflow tank, can reduce 3% water vapor entering the panels.



Stronger frame

The C side of the frame contains curved hook reinforcement, enhanced the mechanical load strength by 10%



Current grading

Current classification effectively avoids 2% power loss caused by current mismatch during installation, achieving max output power

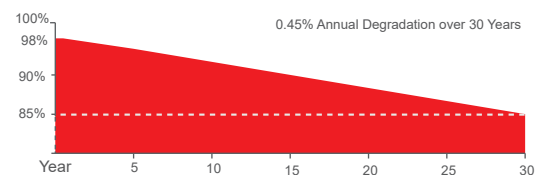


IP68 junction box

IP68 junction box offer perfect waterproof performance

LINEAR PERFORMANCE WARRANTY

- 12 Years Manufacturing Warranty
- 12 Years 93% Power Output
- 30 Years 85% Power Output

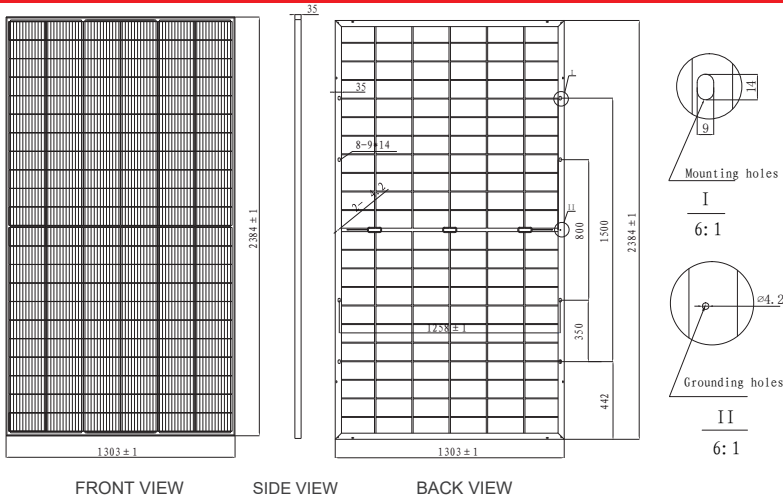


SUNERGY USA WORKS LLC
www.sunergyworks.com



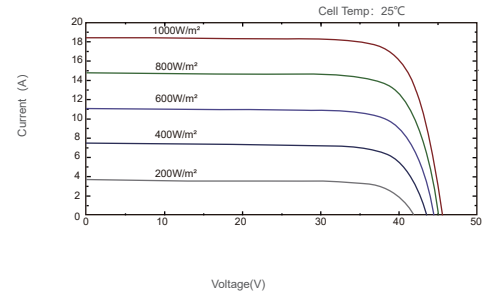
Mars Series SUN 66MD-H12S

MECHANICAL DRAWINGS

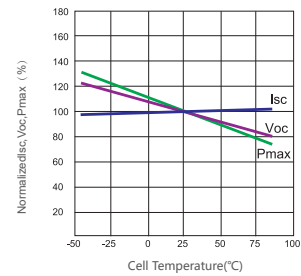


I-V CURVES

I-V Curves at SUN660-66MD-H12S at different Irradiances



Power voltage current curve at different temperature



MECHANICAL SPECIFICATION

Cell Type	Mono Crystalline 210x105mm
Number Of Cells	132 (6x22)
Dimensions(AxBxC)	2384x1303x35mm
Weights	39.5kg
Glass	2.0/2.0mm Tempered Low Iron Glass
Aluminium Frame	Anodised Aluminium
Junction Box	Split Junction Box (IP68 ,three diode)
Connector	Mc4 Compatible
Output Cables	4.0mm ² ,+300mm,-300mm Customized Length

PACKING CONFIGURATION

Container	40' HQ
Pieces Per Pallet	31
Pallets Per Container	18
Pieces Per Container	558

ELECTRICAL CHARACTERISTICS

Module Type	660W		665W		670W		675W	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power At STC(Pmax)	660W	500.2W	665W	504.0W	670W	507.8W	675W	511.6W
Short Circuit Current(Isc)	18.44A	14.90A	18.48A	14.93A	18.51A	14.96A	18.57A	15.00A
Open Circuit Voltage(Voc)	45.6V	42.7V	45.8V	42.9V	46.0V	43.1V	46.2V	43.3V
Maximum Power Current(Imp)	17.42A	14.12A	17.46A	14.15A	17.50A	14.18A	17.53A	14.22A
Maximum Power Voltage(Vmpp)	37.9V	35.4V	38.1V	35.6V	38.3V	35.8V	38.5V	36.0V
Module Efficiency	21.25%		21.41%		21.57%		21.73%	
Power Tolerance	0~+5W		0~+5W		0~+5W		0~+5W	

ELECTRICAL CHARACTERISTICS WITH DIFFERENT REAR SIDE POWER GAIN

(Reference to 660W Front)

Backside Power Gain	5%	10%	15%	20%	25%
Maximum Power At STC(Pmax)	693	726	759	792	825
Short Circuit Current(Isc)	19.32	20.24	21.05	21.96	22.88
Open Circuit Voltage(Voc)	45.6	45.6	45.8	45.8	45.8
Maximum Power Current(Imp)	18.19	19.06	19.82	20.68	21.54
Maximum Power Voltage(Vmpp)	38.1	38.1	38.3	38.3	38.3

STC: 1000W/m² irradiance, 25°C cell temperature, AM1.5. NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, wind speed 1m/s.

