

# 470W

## M6 HALF CELL MONO

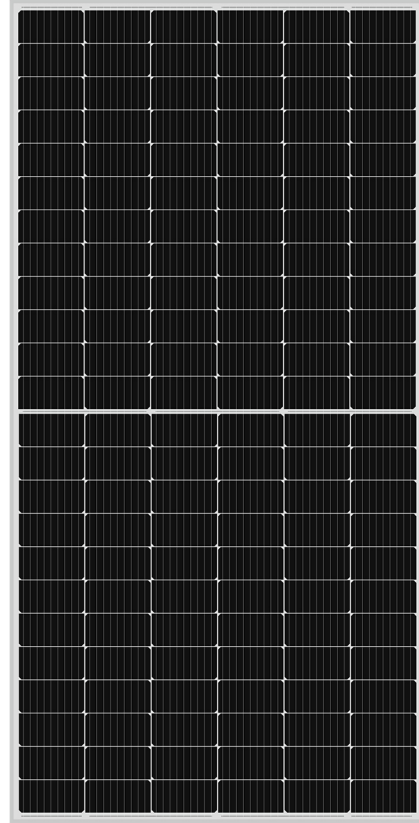
GERMAN BRAND SOLAR PANEL

**450W-470W**  
POWER OUTPUT RANGE

**144 CELL**  
MBB MONO PERC

**21.62%**  
MAXIMUM EFFICIENCY

**0 to +5W**  
POSITIVE POWER TOLERANCE



Product  
Warranty



Output  
Warranty



Higher Efficiency



Lower LID



German Technology



Sand Resistant



Environmentally Friendly



Stable Performance



### Higher Output of Power

Effectively reduce the unit cost of PV solar system by watt



### Optimize the temperature coefficient

Improve the performance under the condition of shadow and low temperature coefficient



### Reduce the shadow loss on the power output

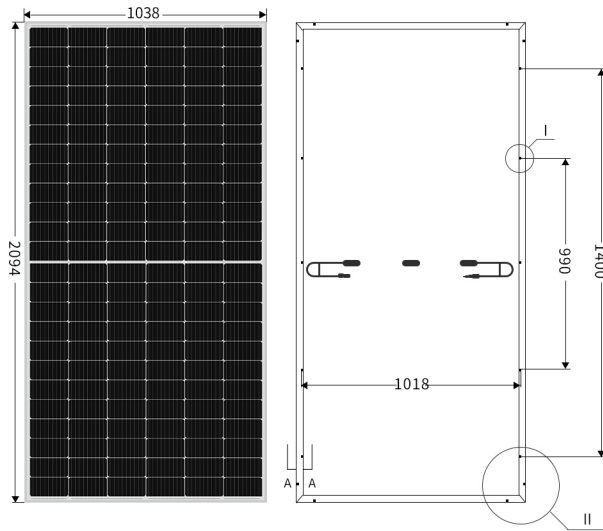
Effectively reduce the risk of heat spot on high efficiency



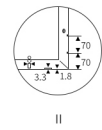
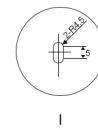
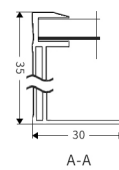
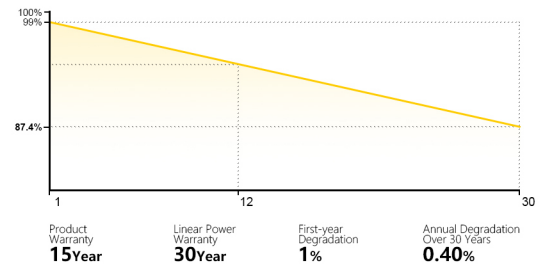
### Stronger the physical property

Optimize the property of power generating and reliability of the system

## DIMENSIONS OF PV MODULE



## LINEAR PERFORMANCE WARRANTY



## MECHANICAL DATA

Solar Cells	Mono PERC
Cell Orientation	144 (6 x 24)
Module Dimensions	2094 x 1038 x 35mm
Weight	23.5kg
Glass	Anti-Reflective, AR Coated and Heat Tempered Solar Glass-3.2mm
Backsheet	White
Frame	Anodized Aluminium Alloy
J-Box	IP 68 Rated
Cables	4.0mm <sup>2</sup> , 350mm or Customized Length
Connector	MC4 Compatible

**PACKAGE** Modules per Pallet:31 pieces Modules per 40'HQ Container:726 pieces

## TEMPERATURE RATINGS

Nominal Operating Cell Temperature(NOCT)	45±2°C
Temperature Coefficient of P <sub>MAX</sub>	-0.35%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	+0.048%/°C

## MAXIMUM RATINGS

Operational Temperature	-40°C to +85°C
Maximum System Voltage	1500V DC
Max Series Fuse Rating	20A
Mechanical Load	5400pa
Wind Load	2400pa

## MODULE TYPE

		HTS-144M6H450		HTS-144M6H455		HTS-144M6H460		HTS-144M6H465		HTS-144M6H470	
		STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Test Environment											
Maximum Power	P <sub>MAX</sub> (W)	450	333.4	455	337.2	460	341	465	344.8	470	348.6
Maximum Power Voltage	V <sub>MPP</sub> (V)	41.39	38.28	41.59	38.48	41.79	38.68	41.99	38.88	42.19	39.08
Maximum Power Current	I <sub>MPP</sub> (A)	10.88	8.69	10.95	8.74	11.02	8.79	11.09	8.84	11.16	8.89
Open Circuit Voltage	V <sub>OC</sub> (V)	50.02	46.68	50.22	46.88	50.42	47.08	50.62	47.28	50.82	47.48
Short Circuit Current	I <sub>SC</sub> (A)	11.49	9.21	11.56	9.26	11.63	9.31	11.7	9.36	11.77	9.41
Tolerance	(W)	0 ± 5		0 ± 5		0 ± 5		0 ± 5		0 ± 5	
Module Efficiency	(%)	20.70		20.93		21.16		21.39		21.62	

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.  
Average efficiency reduction of 4.5% at 200W/m<sup>2</sup> according to EN 60904-1  
NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.