



# 580~600W

**M10 solar modules** Aquaman series

Mono SMBB TOPCon large size half cut  
double glass module

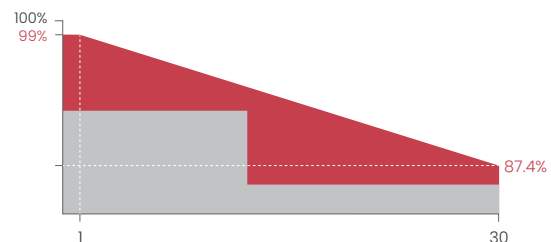
Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for distributed and centralized ground power stations.

## MODULE CHARACTER

-  Exceptional PID Resistance
-  Salt mist resistance/Ammonia resistance /dust and hail resistance
-  Production process reliability test
-  0~+5W Positive Tolerance
-  Lower LID / LETID
-  Reduce BOS cost increase ROI
-  Non-destructive cutting
-  Double-sided electricity generation

## CERTIFICATION

IEC61215/IEC61730  
ISO9001:Quality Management System  
ISO14001:Environmental Management System  
ISO45001:Occupational Health and Safety Management System



 Linear performance warranty  Product warranty

## SUNRISE ENERGY CO., LTD

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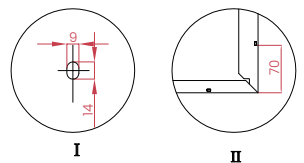
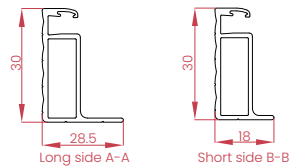
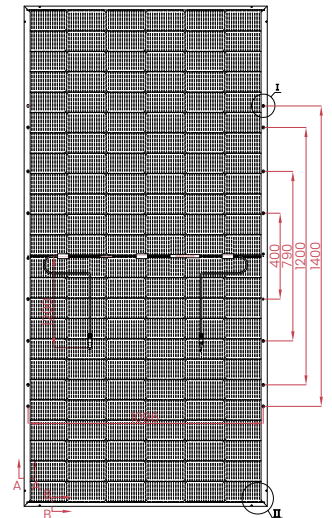
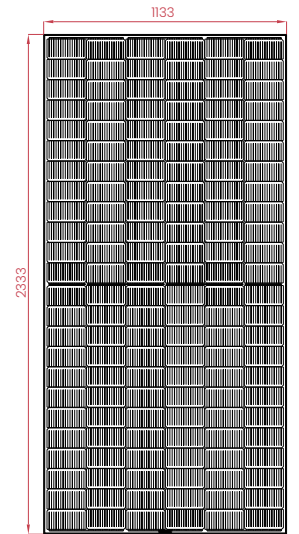
ADD:No.20 Tongzi River West Road, Zhonglou Development Zone, Changzhou, Jiangsu



# SR-72MNHLEPro 580w-600w Aquaman series



## ENGINEERING DRAWINGS



Length: ±2mm  
 Width: ±2mm  
 Thickness: ±1mm  
 Pitch-row: ±2mm

Module Type	SR-72M 580NHLPro		SR-72M 585NHLPro		SR-72M 590NHLPro		SR-72M 595NHLPro		SR-72M 600NHLPro	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Module Efficiency (%)	21.95		22.14		22.33		22.51		22.7	
Tolerance (W)	0~+5		0~+5		0~+5		0~+5		0~+5	
Test Environment	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power Pmax(W)	580	437.55	585	441.32	590	445.09	595	448.86	600	452.63
Open Circuit Voltage Voc(V)	51.26	48.96	51.45	49.14	51.65	49.33	51.84	49.51	52.03	49.70
Short Circuit Current Isc(A)	14.47	11.68	14.54	11.74	14.61	11.79	14.68	11.85	14.74	11.90
Maximum Power Voltage Vm(V)	42.35	39.74	42.51	39.89	42.67	40.04	42.83	40.19	42.99	40.34
Maximum Power Current Im(A)	13.70	11.05	13.77	11.10	13.83	11.15	13.90	11.21	13.96	11.26
Cell Type(mm)	M10 TOPCon									
Number of Cells(Pcs)	144(6×24)									
Maximum System Voltage (V)	DC1500									
Temp.Coeff.of Voc (%/°C)	-0.29									
Temp.Coeff.of Isc (%/°C)	0.045									
Temp.Coeff.of Pm (%/°C)	-0.25									
Operating Temperature (°C)	-40 to 85									
Nominal Operating Cell Temperature(NOCT) (°C)	45±2									
Max.Series Fuse (A)	30									
Pressure Bearing(Pa)	5400									
Wind Bearing (Pa)	2400									

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5  
 NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind speed 1m/s

Different backside power gains(580W)	10%	15%	20%	25%
Peak Power Pmax(W)	638	667	696	725
Open Circuit Voltage Voc(V)	51.30	51.31	51.32	51.34
Short Circuit Current Isc(A)	15.86	16.58	17.29	18.01
Maximum Power Voltage Vm(V)	42.35	42.36	42.37	42.38
Maximum Power Current Im(A)	15.07	15.75	16.43	17.11

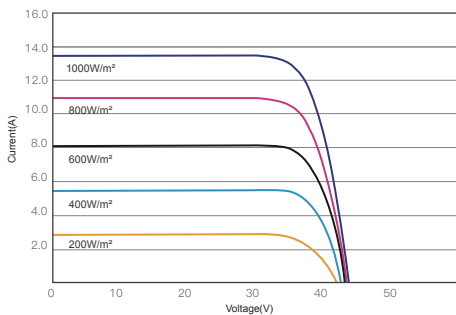
### MATERIAL DETAILS

Frame	Anodized aluminum	Cable&Connector	4mm <sup>2</sup> , EVO2 or EVO2 compatible
Cell	6×24pcs mono solar cell	Junction Box	Ip≥68, TÜV&UL
Glass	2×2.0mm Anti-Reflection Coating Heat Strengthened Glass	Net length of Cable	1200mm or as customer's requirements

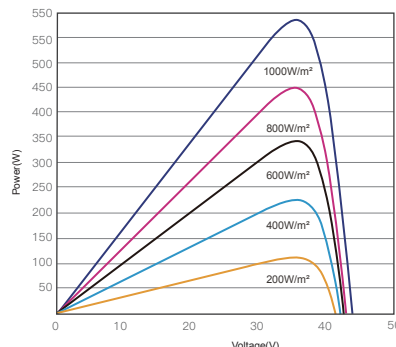
### PACKING DETAILS

Dimension	2333×1133×30mm	Weight	32.3kg
Loading Capacity	720pcs/40'HC	Packing	36pcs/pallet

### IV CURVES



I-V CURVES OF PV MODULE(590W)



P-V CURVES OF PV MODULE(590W)