



430~455W

M10 solar panels Aquaman series

Mono SMBB TOPCon large size half cut
full black double glass solar panel

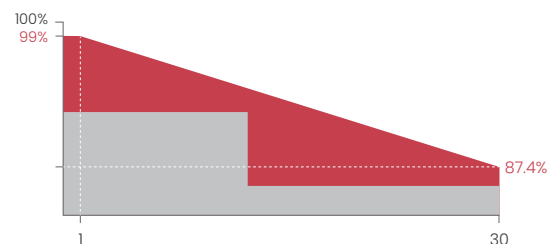
Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for industrial and commercial and distributed scenarios.

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

CERTIFICATION

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



Linear performance warranty



Product warranty



Module Type	SR-54M 430NHLProD		SR-54M 435NHLProD		SR-54M 440NHLProD		SR-54M 445NHLProD		SR-54M 450NHLProD		SR-54M 455NHLProD	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Module Efficiency (%)	21.54		21.79		22.05		22.30		22.55		22.8	
Tolerance (W)	0~+5		0~+5		0~+5		0~+5		0~+5		0~+5	
Test Environment	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power P _{max} (W)	430	324.39	435	328.16	440	331.93	445	335.70	450	339.48	455	343.25
Open Circuit Voltage Voc(V)	38.56	36.83	38.79	37.05	39.02	37.27	39.25	37.49	39.48	37.71	39.71	37.93
Short Circuit Current I _{sc} (A)	14.26	11.51	14.34	11.58	14.42	11.64	14.50	11.71	14.58	11.77	14.65	11.83
Maximum Power Voltage V _m (V)	31.86	29.90	32.05	30.07	32.24	30.25	32.43	30.43	32.62	30.61	32.81	30.79
Maximum Power Current I _m (A)	13.50	10.89	13.58	10.95	13.65	11.01	13.73	11.07	13.80	11.13	13.87	11.18
Cell Type (mm)	M10 TOPCon											
Number of Cells (Pcs)	108(6×18)											
Maximum System Voltage (V)	DC1500											
Temp.Coeff.of Voc (%/°C)	-0.29											
Temp.Coeff.of I _{sc} (%/°C)	0.045											
Temp.Coeff.of P _m (%/°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/m², Cell temperature 25°C, AM1.5
 NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind speed 1m/s

Different backside power gains(450W)	10%	15%	20%	25%
Peak Power P _{max} (W)	495	517.5	540	562.5
Open Circuit Voltage Voc(V)	39.49	39.51	39.52	39.53
Short Circuit Current I _{sc} (A)	16.02	16.75	17.47	18.19
Maximum Power Voltage V _m (V)	32.63	32.64	32.65	32.66
Maximum Power Current I _m (A)	15.17	15.85	16.54	17.22

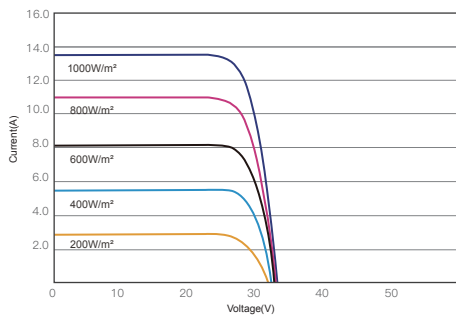
MATERIAL DETAILS

Frame	Anodized aluminum	Cable&Connector	4mm ² , EVO2 or EVO2 compatible
Cell	6×18pcs mono solar cell	Junction Box	Ip≥68, TÜV&UL
Glass	2×2.0mm Anti-Reflection Coating Heat Strengthened Glass	Net length of Cable	350mm or as customer's requirements

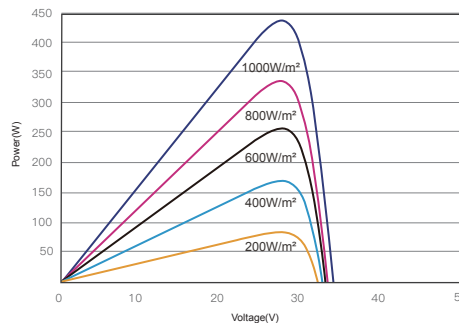
PACKING DETAILS

Dimension	1762×1133×30mm	Weight	24.5kg
Loading Capacity	936pcs/40'HC	Packing	36pcs/pallet

IV CURVES

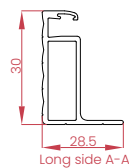
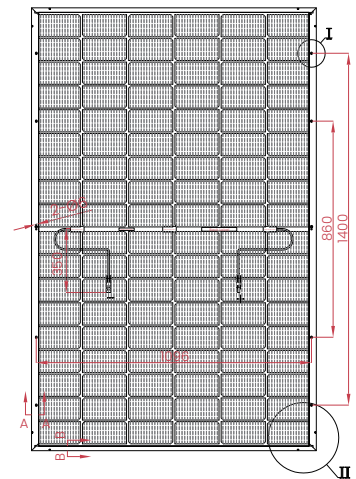
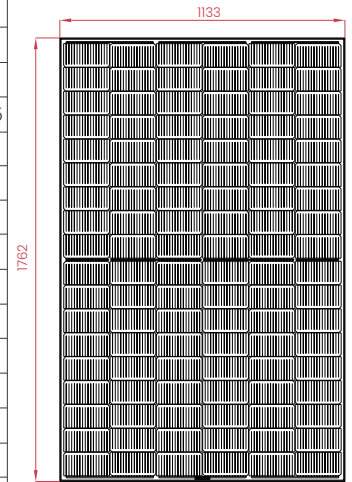


I-V CURVES OF PV MODULE(440W)

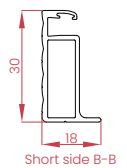


P-V CURVES OF PV MODULE(440W)

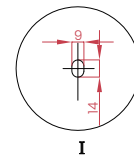
ENGINEERING DRAWINGS



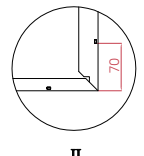
Long side A-A



Short side B-B



I



II

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