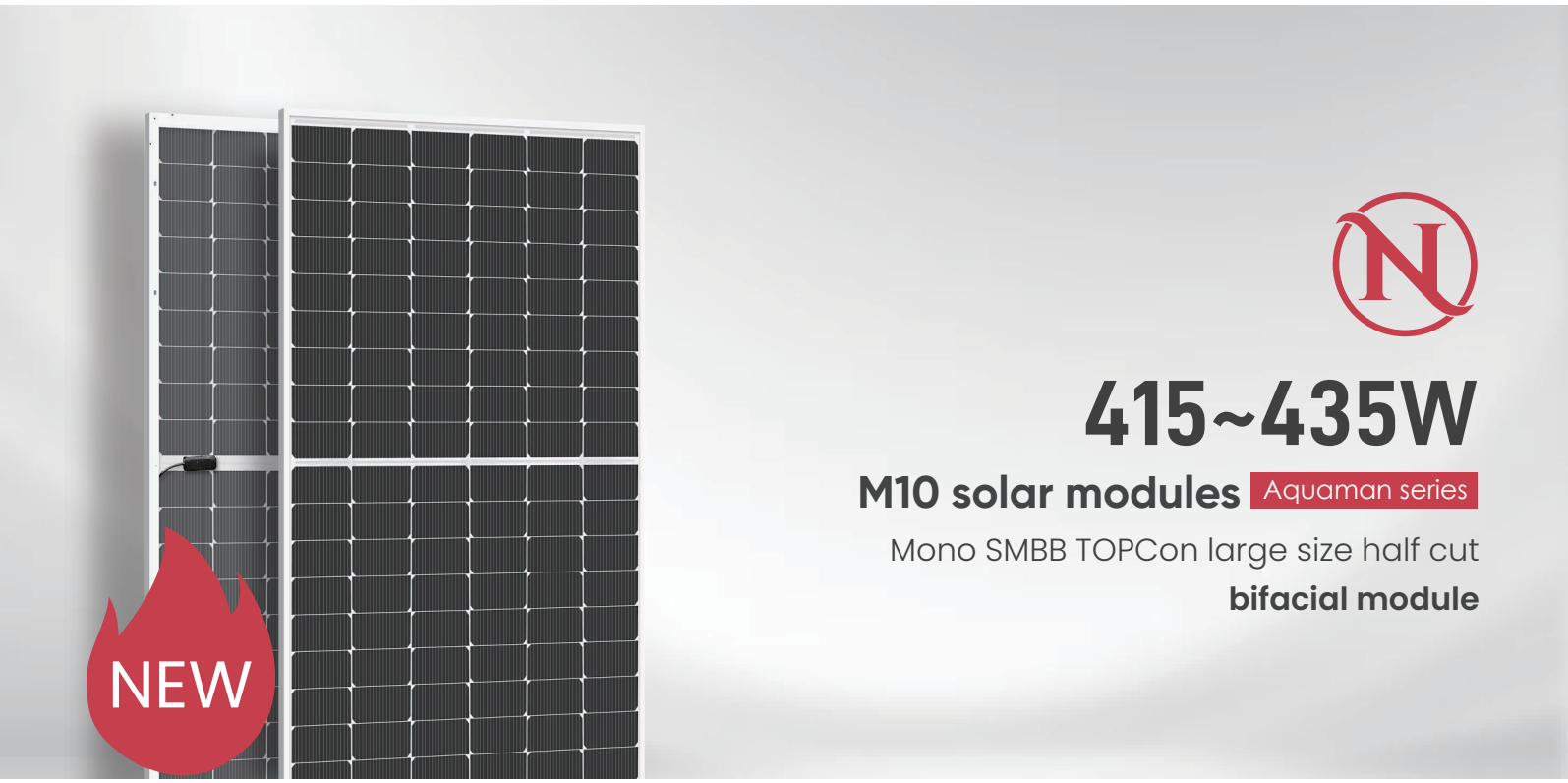
SUNRISE 昊宇光伏 Since 2006
Create A Sustainable Future

www.sunriseenergy.cn



415~435W

M10 solar modules Aquaman series

Mono SMBB TOPCon large size half cut
bifacial module

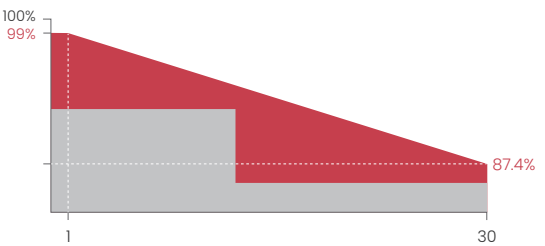
Excellent technical advantages and system design scheme to achieve high reliability, power generation effective gain and EPC cost reduction. Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized design for industrial and commercial and distributed scenarios.

MODULE CHARACTER

- 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



30 YEAR Linear performance warranty

12 YEAR Product warranty

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SR-54MNHLPro 415w-435w Aquaman series

Module Type	SR-54M 415NHLPro		SR-54M 420NHLPro		SR-54M 425NHLPro		SR-54M 430NHLPro		SR-54M 435NHLPro	
Module Efficiency (%)	21.26		21.52		21.78		22.03		22.29	
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)	415	313.07	420	316.84	425	320.62	430	324.39	435	328.16
Open Circuit Voltage Voc(V)	37.90	36.20	38.13	36.42	38.36	36.64	38.59	36.86	38.82	37.08
Short Circuit Current Isc(A)	14.00	11.30	14.08	11.37	14.16	11.44	14.25	11.50	14.33	11.57
Maximum Power Voltage Vm(V)	31.31	29.38	31.50	29.56	31.69	29.74	31.88	29.91	32.07	30.09
Maximum Power Current Im(A)	13.25	10.69	13.33	10.75	13.41	10.81	13.49	10.88	13.56	10.94
Cell Type(mm)	M10 TOPCon									
Number of Cells(Pcs)	108(6×18)									
Maximum System Voltage(V)	DC1500									
Temp.Coeff.of Voc (%/°C)	-0.249									
Temp.Coeff.of Isc (%/°C)	0.045									
Temp.Coeff.of Pm (%/°C)	-0.3									
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(430W)	10%	15%	20%	25%
Peak Power Pmax(W)	473	494.5	516	537.5
Open Circuit Voltage Voc(V)	38.60	38.61	38.62	38.63
Short Circuit Current Isc(A)	15.67	16.38	17.09	17.79
Maximum Power Voltage Vm(V)	31.89	31.9	31.91	31.92
Maximum Power Current Im(A)	14.84	15.51	16.18	16.84

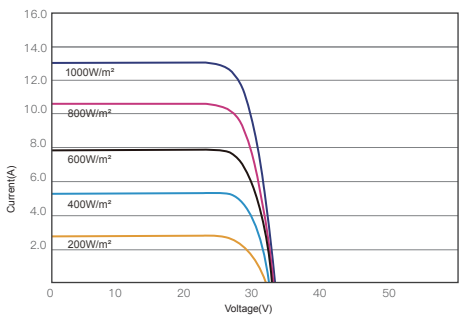
MATERIAL DETAILS

Frame	Anodized aluminum	Cable&Connector	4mm², EVO2 or EVO2 compatible
Cell	6×18pcs mono solar cell	Junction Box	Ip≥68, TÜV&UL
Glass	3.2mm Anti-Reflection Coating Heat Strengthened Glass	Net length of Cable	350mm or as customer's requirements

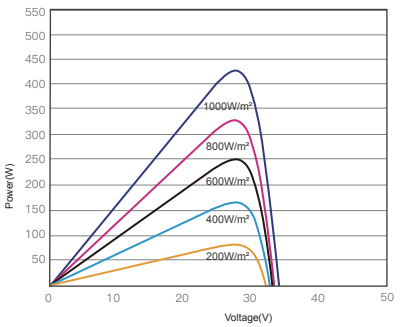
PACKING DETAILS

Dimension	1723×1133×30mm	Weight	20kg
Loading Capacity	936pcs/40'HC	Packing	36pcs/pallet

IV CURVES



I-V CURVES OF PV MODULE(425W)



P-V CURVES OF PV MODULE(425W)

ENGINEERING DRAWINGS