



410~425W

M10 solar modules Aquaman series

Mono SMBB TopCon large size half cut
full black double glass module

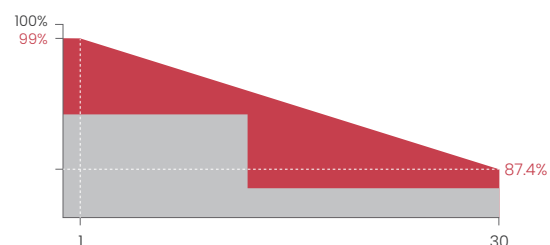
Elegant design in all-black appearance, harmonious integration with the components of the building to provide an intense aesthetic experience. Products can match different installation conditions, taking into account high adaptability and high compatibility. With mature support and inverter scheme, customized 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
-  Aesthetic appearance design
-  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

SUNRISE ENERGY CO., LTD TEL: +86-519-81688389 E-mail: info@sunriseenergy.cn

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

⚠ If any update, Sunrise would not make further notice. Sunrise reserves the right of final interpretation.



Module Type	SR-54M410NHLPro		SR-54M415NHLPro		SR-54M420NHLPro		SR-54M425NHLPro	
Module Efficiency (%)	21.01		21.26		21.52		21.78	
Tolerance (W)	0 ~ +5		0 ~ +5		0 ~ +5		0 ~ +5	
Test Environment	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power Pmax(W)	410	309.30	415	313.07	420	316.84	425	320.62
Open Circuit Voltage Voc(V)	37.64	35.95	37.87	36.17	38.10	36.39	38.33	36.61
Short Circuit Current Isc(A)	13.92	11.24	14.01	11.31	14.09	11.38	14.17	11.44
Maximum Power Voltage Vm(V)	31.10	29.18	31.29	29.36	31.48	29.54	31.67	29.72
Maximum Power Current Im(A)	13.18	10.63	13.26	10.70	13.34	10.76	13.42	10.82
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)	25							
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

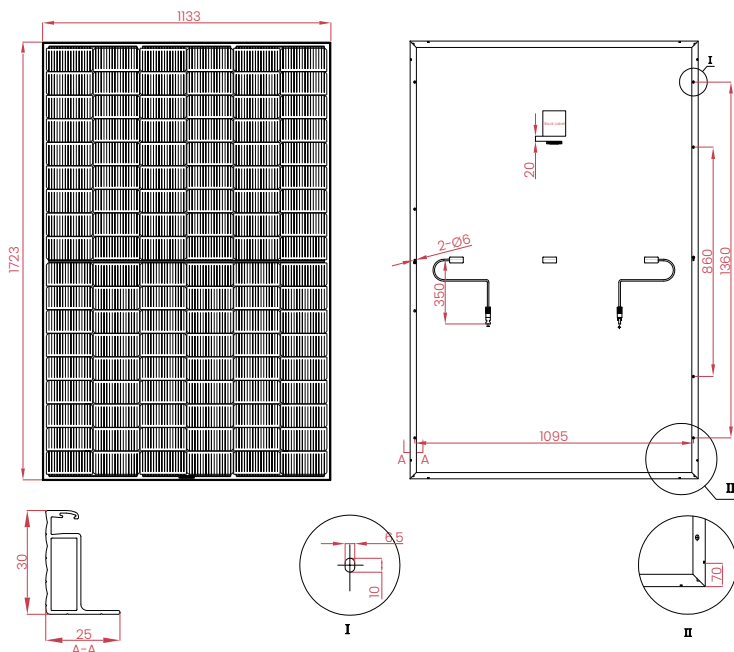
MATERIAL DETAILS

Frame	Anodized aluminum	Net length of Cable	350mm or as customer's requirements
Cell	6×18pcs mono solar cell	Junction Box	IP≥68, TÜV & UL
Diode quantity	3	Cable&Connector	4mm ² , EVO2 or EVO2 compatible
Glass	2×2.0mm Anti-Reflection Coating Heat Strengthened Glass		

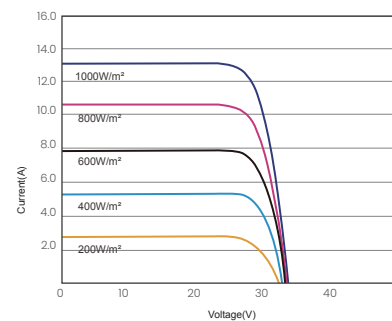
PACKING DETAILS

Dimension	1723×1133×30mm	Weight	22.8kg
Loading Capacity	936pcs/40HC	Packing	36pcs/pallet

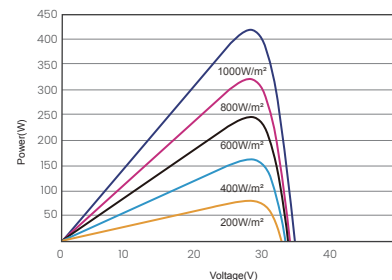
ENGINEERING DRAWINGS



IV CURVES



I-V CURVES OF PV MODULE(420W)



P-V CURVES OF PV MODULE(420W)