

OPTONICA



Hyper-ion™

Heterojunction Hyper-ion Series Bifacial Module

RSM110-8-570-590BHDG

SKU: 9414

Hyper-link Interconnection

Patented Technology

570-590 Wp

Power Output Range

22.6 %

Higher Efficiency

0~+3%

Positive Power Tolerance



No B-O caused LID



Ultra-high bifacial factor



Ultra-high power generation, ultra-low carbon emission



Most stable power temperature coefficient



Lead technology of metallization process



Excellent anti-LID & anti-PID performance

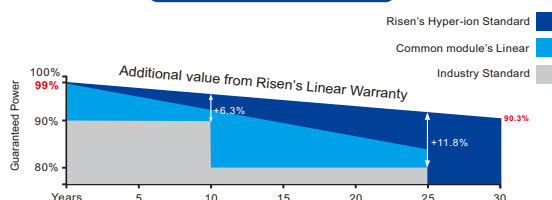


* As there are different certification requirements in different markets, please contact your local Risen Energy sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

LINEAR PERFORMANCE WARRANTY

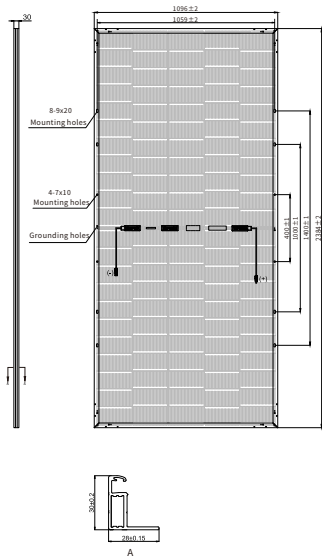
15 years product warranty / 30 years linear power warranty

0.3% Annual Degradation over 30 years



Dimensions of PV Module

Unit: mm



ELECTRICAL DATA (STC)

Model Type	RSM110-8-570-590BHDG				
Rated Power in Watts-Pmax(Wp)	570	575	580	585	590
Open Circuit Voltage-Voc(V)	41.27	41.36	41.46	41.55	41.64
Short Circuit Current-Isc(A)	17.57	17.67	17.77	17.88	17.98
Maximum Power Voltage-Vmpp(V)	34.60	34.68	34.76	34.84	34.92
Maximum Power Current-Impp(A)	16.49	16.60	16.71	16.81	16.92
Module Efficiency (%) *	21.8	22.0	22.2	22.4	22.6

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.
Bifacial factor: 85 ± 10(%) * Module Efficiency (%): Rounding to the nearest number

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	627	633	638	644	649
Open Circuit Voltage-Voc(V)	41.27	41.36	41.46	41.55	41.64
Short Circuit Current-Isc(A)	19.32	19.44	19.55	19.66	19.78
Maximum Power Voltage-Vmpp(V)	34.60	34.68	34.76	34.84	34.92
Maximum Power Current-Impp(A)	18.14	18.26	18.38	18.50	18.61

Rear side power gain: The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA (NMOT)

Model Type	RSM110-8-570-590BHDG				
Maximum Power-Pmax (Wp)	435.4	439.3	443.1	447.0	450.8
Open Circuit Voltage-Voc (V)	38.67	38.75	38.85	38.93	39.02
Short Circuit Current-Isc (A)	14.40	14.49	14.57	14.66	14.74
Maximum Power Voltage-Vmpp (V)	32.36	32.43	32.50	32.58	32.65
Maximum Power Current-Impp (A)	13.46	13.55	13.63	13.72	13.81

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA

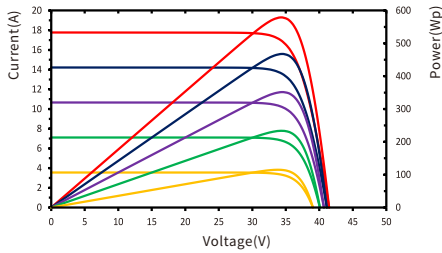
Solar cells	n-type HJT
Cell configuration	110 cells (5 × 11 × 5 × 11)
Module dimensions	2384 × 1096 × 30mm
Weight	33kg
Superstrate	High Transmission, AR Coated Heat Strengthened Glass
Substrate	Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm ² , Positive(+)350mm, Negative(-)230mm (Connector Included), or customized length
Connector	Risen Twinsel PV-SY02, IP68

TEMPERATURE & MAXIMUM RATINGS

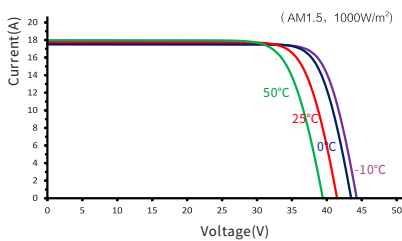
Nominal Module Operating Temperature (NMOT)	43°C ± 2°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	0.047%/°C
Temperature Coefficient of Pmax	-0.24%/°C
Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

RSM110-8-580BHDG

I-V characteristics at different irradiances



I-V characteristics at different temperatures



PACKAGING CONFIGURATION

	40ft(HQ)
Number of modules per container	700
Number of modules per pallet	35
Number of pallets per container	20
Packaging box dimensions (LxWxH) in mm	2395 × 1075 × 1235
Box gross weight[kg]	1200