

n-type TOPCon BIFACIAL MODULE

RSM144-9-570-595BNDG

570-595_{Wp}

23.0%

0~+3%

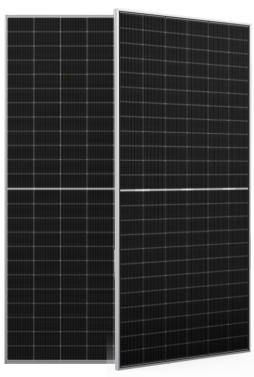
1500_{VDC}

Power Output Range

Maximum Efficiency

Positive power tolerance

Maximum System Voltage



* As there are different certification requirements in different markets, please contact

your local Korean Solar sales representative for the specific certificates applicable to

the products in the region in which the products are to be used.

The module picture is for reference only

KEY FEATURES



Excellent power generation



Excellent anti-LID & anti-PID performance



Excellent temperature coefficient (Pmax): -0.29%/°C



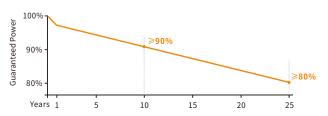
Excellent weak-light performance



Excellent warranty assurance

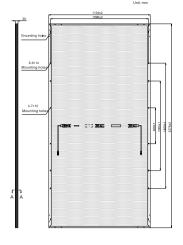
LINEAR PERFORMANCE WARRANTY

5 years Product Warranty / 25 years Linear Power Warranty



^{*} Please check the valid version of Limited Product Warranty which is officially released by Korean Solar NEW ENERGY TECHNOLOGY CO., Ltd.

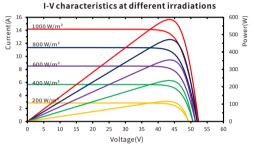
Dimensions of PV Module

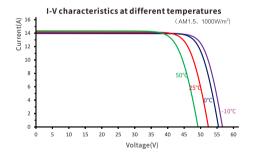




*Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

RSM144-9-585BNDG





PACKAGING CONFIGURATION

	40ft(HQ)	20ft	
Number of modules per container	720	180	
Number of modules per pallet	36	36	
Number of pallets per container	5		
Packaging box dimensions (LxWxH) in mm	2290×1110×1260		
Box gross weight[kg]	1170		

ELECTRICAL DATA (STC)

Model Type			RSM144-9-5	70-595BNDG	i	
Rated Power in Watts-Pmax(Wp)	570	575	580	585	590	595
Open Circuit Voltage-Voc(V)	51.77	51.97	52.17	52.37	52.55	52.73
Short Circuit Current-Isc(A)	14.01	14.06	14.12	14.18	14.24	14.30
Maximum Power Voltage-Vmpp(V)	43.40	43.60	43.80	44.00	44.16	44.32
Maximum Power Current-Impp(A)	13.15	13.21	13.26	13.32	13.37	13.43
Module Efficiency (%) ★	22.1	22.3	22.5	22.6	22.8	23.0

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3. Bifacial factor: 80±5(%) *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	655
Open Circuit Voltage-Voc(V)	51.77	51.97	52.17	52.37	52.55	52.73
Short Circuit Current-Isc(A)	15.41	15.47	15.53	15.60	15.66	15.73
Maximum Power Voltage-Vmpp(V)	43.40	43.60	43.80	44.00	44.16	44.32
Maximum Power Current-Impp(A)	14.47	14.53	14.59	14.65	14.71	14.77

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	RSM144-9-570-595BNDG					
Maximum Power-Pmax (Wp)	432.3	436.1	439.8	443.6	447.1	450.7
Open Circuit Voltage-Voc (V)	48.15	48.33	48.52	48.70	48.87	49.04
Short Circuit Current-Isc (A)	11.48	11.53	11.58	11.63	11.68	11.73
Maximum Power Voltage-Vmpp (V)	40.28	40.46	40.65	40.83	40.98	41.13
Maximum Power Current-Impp (A)	10.73	10.78	10.82	10.87	10.91	10.96

NMOT: Irradiance at 800 W/m 2 , Ambient Temperature 20 $^{\circ}$ C, Wind Speed 1 m/s.

MECHANICAL DATA

Solar cells	n-type TOPCon			
Cell configuration	144 cells (6×12+6×12)			
Module dimensions	2278×1134×30mm (89.69×44.65×1.18 in)			
Weight	31kg (68.34 lb)			
Superstrate	2.0mm(0.08 in), High Transmission, AR Coated Heat Strengthened Glass			
Substrate	2.0mm(0.08 in), Heat Strengthened Glass			
Frame	Anodized Aluminium Alloy, Silver Color			
J-Box	Potted, IP68, 1500VDC, 3 Schottky by pass diodes			
Cables	4.0mm^2 , $350 \text{mm} (13.78 \text{in})$ (+), $230 \text{mm} (9.06 \text{in})$ (-) , connector included , or customized length			
Connector	PV-SY02/Others			
Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back), under certain installation method			

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.046%/°C
Temperature Coefficient of Pmax	-0.29%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

