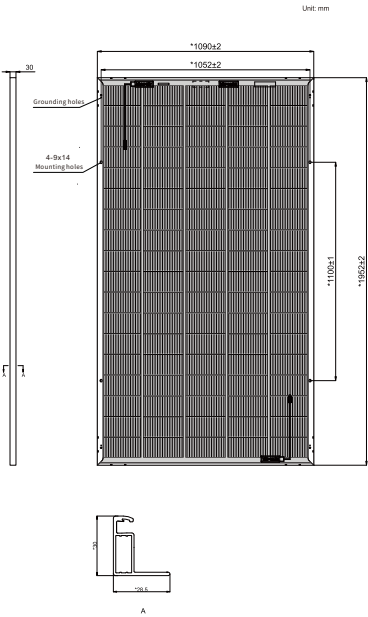
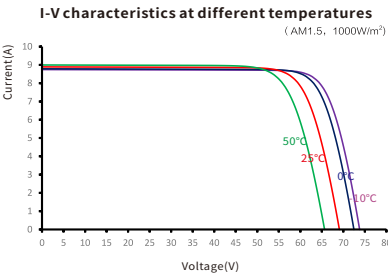
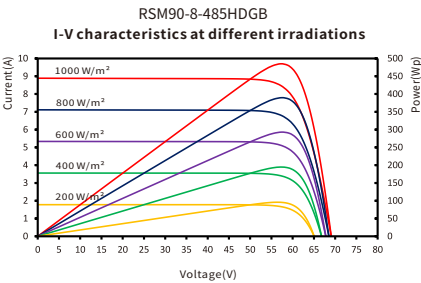


Dimensions of PV Module



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



PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	888	185
Number of modules per pallet	37	37
Number of pallets per container	24	5
Packaging box dimensions (LxWxH) in mm	1970×1130×1230	
Box gross weight[kg]	933	

ELECTRICAL DATA (STC)

Model Type	RSM90-8-460HDGB	RSM90-8-465HDGB	RSM90-8-470HDGB	RSM90-8-475HDGB	RSM90-8-480HDGB
Rated Power in Watts-Pmax(Wp)	460	465	470	475	480
Open Circuit Voltage-Voc(V)	68.28	68.44	68.60	68.76	68.92
Short Circuit Current-Isc(A)	8.56	8.63	8.69	8.76	8.82
Maximum Power Voltage-Vmpp(V)	56.70	56.86	57.02	57.20	57.36
Maximum Power Current-Impp(A)	8.12	8.18	8.25	8.31	8.37
Module Efficiency (%) *	21.6	21.9	22.1	22.3	22.6
Short Circuit Current-Isc-aBSI(A)	10.87	10.96	11.04	11.13	11.20

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3
* Module Efficiency(%): Round-off to the nearest number
Power sorting and binning tolerances:0-5W; Power measurement tolerance: ±3%
Short Circuit Current tolerance: ±5%, Open Circuit Voltage tolerance: ±5%
25 Years Limited Product Warranty (Intended for rooftop applications only); 30 Years Limited Power Warranty, only applicable to the front side (STC conditions);
Bifacial factor:90 ±5(%)
The first year degradation:1%, annual degradation:0.3%, power retention rate within 30 years:90.3%
ΦVoc=98%±5%, ΦIsc=90%±10%, ΦPmax=90%±5%;
Module Temperature rating [T98]max of 70°C;
aBSI: front irradiance 1000W/m², rear irradiance 300W/m²

ELECTRICAL DATA (BNPI)

Total Equivalent power -Pmax (Wp) (±3%)	515	521	526	532	538
Open Circuit Voltage-Voc(V) (±5%)	68.28	68.44	68.60	68.76	68.92
Short Circuit Current-Isc(A) (±5%)	9.60	9.67	9.74	9.82	9.89
Maximum Power Voltage-Vmpp(V)	56.70	56.86	57.02	57.20	57.36
Maximum Power Current-Impp(A)	9.09	9.17	9.24	9.31	9.38

BNPI:front irradiance 1000W/m², rear irradiance 135W/m²

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	506	511	517	522	528
Open Circuit Voltage-Voc(V)	68.28	68.44	68.60	68.76	68.92
Short Circuit Current-Isc(A)	9.42	9.49	9.56	9.64	9.70
Maximum Power Voltage-Vmpp(V)	56.70	56.86	57.02	57.20	57.36
Maximum Power Current-Impp(A)	8.92	9.00	9.07	9.13	9.21

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.

MECHANICAL DATA

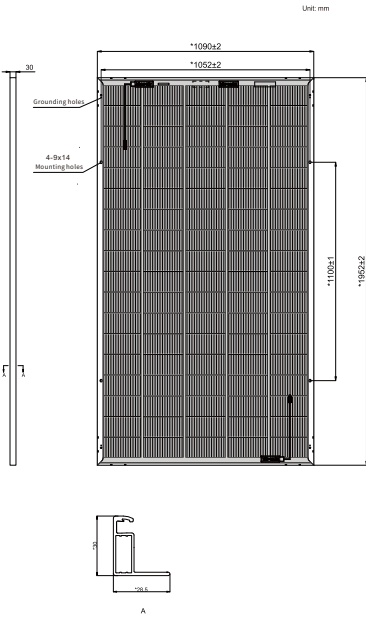
Solar cells	n-type HJT
Cell configuration	90 cells (18×5)
Module dimensions	1952×1090×30mm (76.85×42.91×1.18 in)
Weight	24kg (52.91 lb)
Superstrate	2.0 mm(0.08 in), High Transmission, AR Coated Heat Strengthened Glass
Substrate	1.6 mm(0.06 in), Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm² , 1200mm(47.24 in)(+), 1200mm(47.24 in)(-), connector Included, or customized length
Connector	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY02 Staubli Electrical Connectors AG PV-KST4-EV02/xy, PV-KBT4EV02/xy

TEMPERATURE & MAXIMUM RATINGS

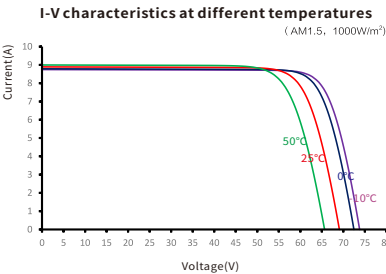
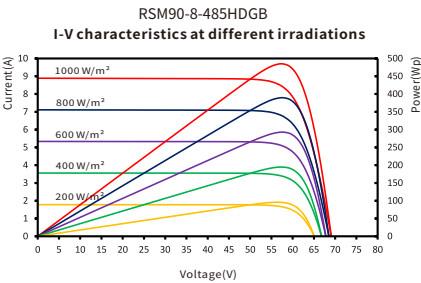
Nominal Module Operating Temperature (NMOT)	43°C±2°C
Temperature Coefficient of Voc	-0.22%/°C
Temperature Coefficient of Isc	0.047%/°C
Temperature Coefficient of Pmax	-0.24%/°C
Level T _{js} ≤ 70°C	-40°C~+70°C *
Maximum System Voltage	1500VDC
Fire Class According to UL790	CLASS C
Maximum Series Fuse Rating	25A
Limiting Reverse Current	25A

* Short-term up to 85°C; higher operation requires IEC TS 63126 testing

Dimensions of PV Module



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



PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	888	185
Number of modules per pallet	37	37
Number of pallets per container	24	5
Packaging box dimensions (LxWxH) in mm	1970×1130×1230	
Box gross weight[kg]	933	

ELECTRICAL DATA (STC)

Model Type	RSM90-8-485HDGB	RSM90-8-490HDGB	RSM90-8-495HDGB	RSM90-8-500HDGB
Rated Power in Watts-Pmax(Wp)	485	490	495	500
Open Circuit Voltage-Voc(V)	69.08	69.24	69.40	69.56
Short Circuit Current-Isc(A)	8.89	8.95	9.01	9.07
Maximum Power Voltage-Vmpp(V)	57.54	57.68	57.84	58.02
Maximum Power Current-Impp(A)	8.43	8.50	8.56	8.62
Module Efficiency (%) *	22.8	23.0	23.3	23.5
Short Circuit Current-Isc-aBSI(A)	11.29	11.37	11.44	11.52

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3
* Module Efficiency(%): Round-off to the nearest number
Power sorting and binning tolerances:0-5W; Power measurement tolerance: ±3%
Short Circuit Current tolerance: ±5%, Open Circuit Voltage tolerance: ±5%
25 Years Limited Product Warranty (Intended for rooftop applications only); 30 Years Limited Power Warranty, only applicable to the front side (STC conditions);
Bifacial factor:90 ±5(%)
The first year degradation:1%, annual degradation:0.3%, power retention rate within 30 years:90.3%
ΦVoc=98%±5%, ΦIsc=90%±10%, ΦPmax=90%±5%;
Module Temperature rating [T98]max of 70°C;
aBSI: front irradiance 1000W/m², rear irradiance 300W/m²

ELECTRICAL DATA (BNPI)

Total Equivalent power -Pmax (Wp) (±3%)	543	549	554	560
Open Circuit Voltage-Voc(V) (±5%)	69.08	69.24	69.40	69.56
Short Circuit Current-Isc(A) (±5%)	9.97	10.03	10.10	10.17
Maximum Power Voltage-Vmpp(V)	57.54	57.68	57.84	58.02
Maximum Power Current-Impp(A)	9.45	9.52	9.59	9.66

BNPI:front irradiance 1000W/m², rear irradiance 135W/m²

Electrical characteristics with 10% rear side power gain

Total Equivalent power -Pmax (Wp)	533	539	544	550
Open Circuit Voltage-Voc(V)	69.08	69.24	69.40	69.56
Short Circuit Current-Isc(A)	9.78	9.85	9.91	9.98
Maximum Power Voltage-Vmpp(V)	57.54	57.68	57.84	58.02
Maximum Power Current-Impp(A)	9.27	9.34	9.41	9.48

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.

MECHANICAL DATA

Solar cells	n-type HJT
Cell configuration	90 cells (18×5)
Module dimensions	1952×1090×30mm (76.85×42.91×1.18 in)
Weight	24kg (52.91 lb)
Superstrate	2.0 mm(0.08 in), High Transmission, AR Coated Heat Strengthened Glass
Substrate	1.6 mm(0.06 in), Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, Black
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm² , 1200mm(47.24 in)(+), 1200mm(47.24 in)(-), connector Included, or customized length
Connector	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY02 Staubli Electrical Connectors AG PV-KST4-EV02/xy, PV-KBT4EV02/xy

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
Level T _{js} ≤ 70°C	-40°C~+70°C *
Maximum System Voltage	1500VDC
Fire Class According to UL790	CLASS C
Maximum Series Fuse Rating	25A
Limiting Reverse Current	25A

* Short-term up to 85°C; higher operation requires IEC TS 63126 testing