

RT9K-M-DG

120 Cells
 Mono Half-Cell 18BB

625-650W
 Power output

22.97%
 The Highest Efficiency

0 ~ +5W
 Tolerance

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RT9K-M-DG

RT9K-M-DG HALF-CELL series is produced with high efficiency multi-busbar cells, which can reduce the module internal power loss to improve its conversion efficiency, as well as lower the failure risk caused by cracks and broken busbar to enhance the module reliability. Combined with half-cell technology, the module is highly resistant to hot-spot crisis caused by shadow effect.



High Reliability

Multi-busbar technology can effectively reduce the reliability risk caused by cells cracks and broken busbar.



Anti-PID Resistance

Prominent anti-PID performance reduces the power degradation, leading to higher energy yield and lower LCOE.



Durability Against Extreme Conditions

Certified to resist high salt mist and ammonia conditions.



High Efficiency

Multi-busbar technology can reduce the module internal power loss to improve the module conversion efficiency significantly.



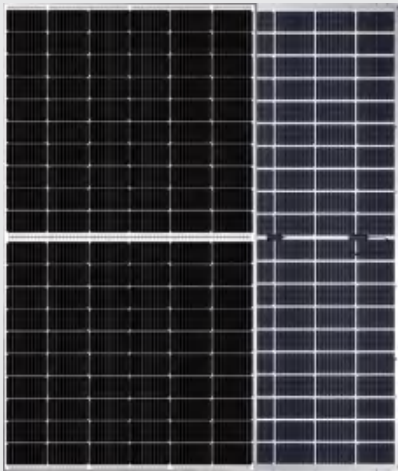
Low-Light Performance

With high transmittance and anti-reflective 2.0+2.0mm tempered glass, the module has stronger performance under low light circumstances.

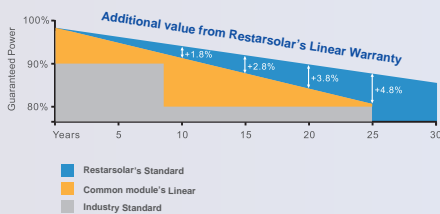


High Mechanical Strength

Certified to withstand: high wind load(2400Pa) and snow load(5400Pa).



0.5% Annual Degradation over 30 years



LINEAR PERFORMANCE WARRANTY

15 Year Product Warranty

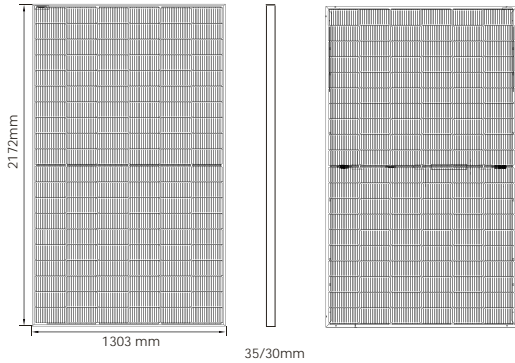
30 Year Linear Power Warranty

Full range of products and certification systems

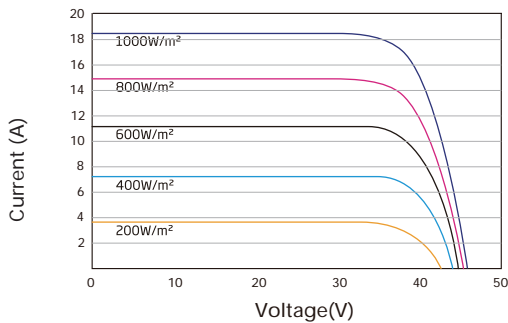
ISO 9001/14001 TUV PID-FREE CE IEC 61215/61730/61701/62716



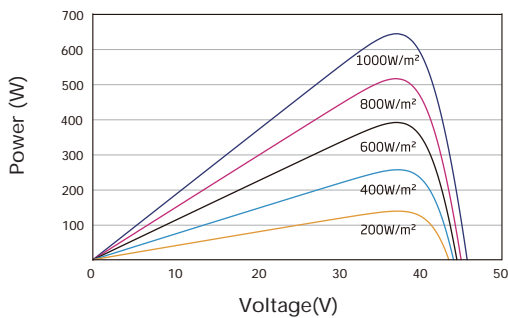
Dimension of PV Modules Unit: mm



I-V CURVES OF PV MODULE(645W)



P-V CURVES OF PV MODULE(645W)



ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	625	630	635	640	645	650
Open Circuit Voltage-Voc(V)	43.55	43.75	43.95	44.15	44.35	44.55
Short Circuit Current-Isc(A)	18.22	18.27	18.31	18.35	18.39	18.43
Maximum Power Voltage-Vmp(V)	36.34	36.53	36.73	36.94	37.14	37.34
Maximum Power Current-Imp(A)	17.20	17.25	17.29	17.33	17.37	17.41
Module Efficiency(%)	22.08%	22.26%	22.44%	22.61%	22.79%	22.97%

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

ELECTRICAL DATA(NOCT)

Maximum Power-Pmax(Wp)	476	480	484	488	492	496
Open Circuit Voltage-Voc (V)	41.15	41.34	41.53	41.72	41.91	42.10
Short Circuit Current-Isc(A)	14.72	14.76	14.79	14.83	14.86	14.89
Maximum Power Voltage-Vmp(V)	34.16	34.34	34.53	34.72	34.91	35.10
Maximum Power Current-Imp(A)	13.93	13.98	14.02	14.05	14.09	14.13

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

INTEGRATED PWER @ STC (REFERENCE TO 10%)

Maximum Power-Pmax(Wp)	688	693	698	704	710	715
Open Circuit Voltage-Voc (V)	43.55	43.75	43.95	44.15	44.35	44.55
Short Circuit Current-Isc(A)	20.06	20.10	20.13	20.19	20.25	20.28
Maximum Power Voltage-Vmp(V)	36.34	36.53	36.73	36.94	37.14	37.34
Maximum Power Current-Imp(A)	18.93	18.97	19.00	19.06	19.12	19.15
Module Efficiency	24.31%	24.49%	24.66%	24.88%	25.09%	25.26%
BNPI/Isc(BSI)	22.59	22.65	22.70	22.75	22.80	22.85

MECHANICAL DATA

Solar cells	Mono-crystalline 210*105mm, 18 Bus bars
Cell configuration	120cells(6*20)
Module dimensions	2172*1303*35mm/30mm
Weight	34.5kg/33.9kg
Front Cover	2.0+2.0mm Tempered Glass
J-BOX	IP68
Cable	4mm ² (IEC)/12AWG(UL),300mm+300mm or customized
Connectors	MC4 or MC4 Comparable
Standard Packaging	31/36pcs/pallet

TEMPERATURE & MAXIMUM RATINGS

Nominal Operating Cell Temperature(NOCT)	45°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.045%/°C
Temperature Coefficient of Pmax	-0.30%/°C
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V(IEC)/1500V(UL)
Max Series Fuse Rating	35A
Limiting Reverse Current	35A

PACKAGING CONFIGURATION

	40HQ
Number of modules per container	558/648 pcs
Package	31/36 pcs/pallet
Package Number	18 pallets
Package Weight	1092/1243 kg/pallet
Package Dimension	1325*1130*2310 mm/pallet