

RT8K-M

120 Cells
Mono Half-Cell 9-11BB

440-460 W
Power output

21.23 %
The Highest Efficiency

0~+5W
Tolerance

WWW.RESTARSOLAR.COM

RT8K-M 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.



**HIGHER ENERGY GENERATION
 AND LOWER POWER LOSS**



ANTI HOT SPOT&PID FREE



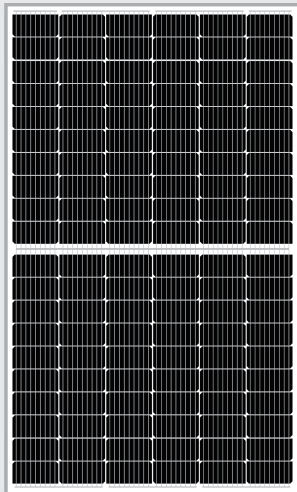
LESS SHADING EFFECT



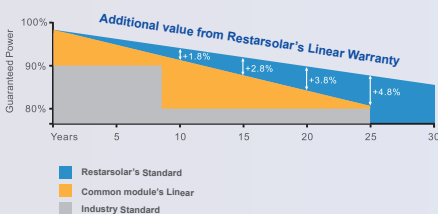
**APPLICABLE FOR 1500V SYSTEM, LOWER
 SYSTEM COST**



**Entire module certified to withstand high
 wind loads(2400Pascal) and snow loads
 (5400 Pascal)***



0.5% Annual Degradation over 30 years

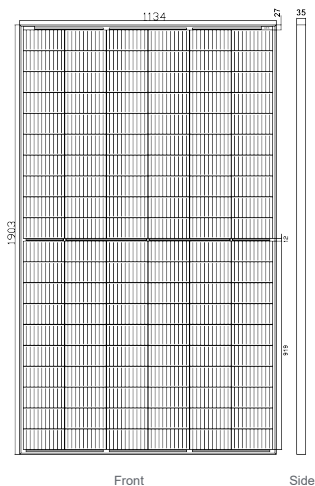


LINEAR PERFORMANCE WARRANTY
 12 year Product Warranty / 30 year Linear Power Warranty

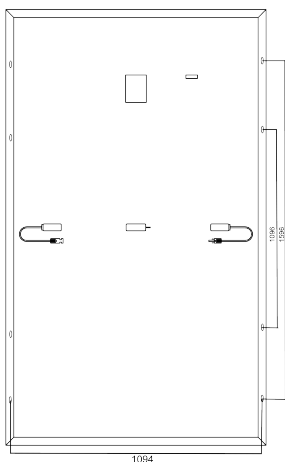
Full range of products and certification systems
 ISO 9001 TUV PID-FREE CE IEC61215/61730/61701/62716



Dimension of PV Modules Unit: mm

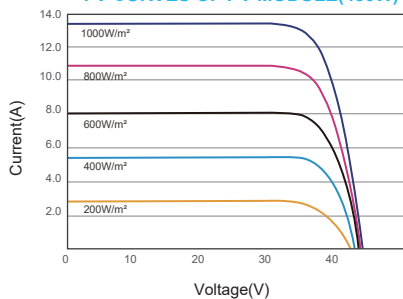


Front Side

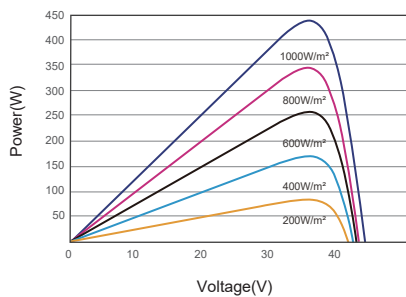


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I-V CURVES OF PV MODULE(450W)



P-V CURVES OF PV MODULE(450W)



ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	440	445	450	455	460
Open Circuit Voltage-Voc(V)	41.02	41.10	41.18	41.33	41.48
Short Circuit Current-Isc(A)	13.73	13.79	13.85	13.93	14.01
Maximum Power Voltage-Vmp(V)	33.72	33.82	33.91	34.06	34.20
Maximum Power Current-Imp(A)	13.05	13.16	13.27	13.36	13.45
Module Efficiency (%)	20.39%	20.62%	20.85%	21.08%	21.32%

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)	327	331	335	339	342
Open Circuit Voltage-Voc (V)	38.72	38.79	38.87	39.01	39.15
Short Circuit Current-Isc (A)	11.09	11.14	11.19	11.25	11.32
Maximum Power Voltage-Vmp(V)	31.39	31.56	31.73	31.91	32.07
Maximum Power Current-Imp(A)	10.43	10.49	10.55	10.61	10.67

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

MECHANICAL DATA

Solar cells	Mono-crystalline 182*91mm,9/10/11 Bus bars
Cell configuration	120cells(6*20)
Module dimensions	1903*1134*35mm
Weight	24.8kg
Front Cover	3.2mm Tempered Glass
Frame Material	Anodized Aluminum Alloy
J-BOX	IP68,3Diodes
Cable	4mm ² (IEC)/12AWG(UL),350mm(+)/450mm(-),or customized
Connectors	MC4 or MC4 Comparable
Standard Packaging	31pcs/pallet

TEMPERATURE & MAXIMUM RATINGS

Nominal Operating Cell Temperature(NOCT)	45 C ±2 C
Temperature Coefficient of Voc	- 0.32%/ C
Temperature Coefficient of Isc	0.05%/ C
Temperature Coefficient of Pmax	- 0.35%/ C
Operational Temperature	- 40~+85 C
Maximum System Voltage	1500V(IEC)/1500V(UL)
Max Series Fuse Rating	25A
Limiting Reverse Current	25A

PACKAGING CONFIGURATION

	40HQ
Number of modules per container	744pcs
Package	31pcs/pallet
Package Number	24pallets