

# RT8K-M-FB

**120 Cells**

Mono N-Type/Topcon MBB

**470-495W**

Power output

**22.94%**

The Highest Efficiency

**0 ~ +5W**

Tolerance

WWW.RESTARSOLAR.COM

## RT8K-M-FB FULL BLACK

RT8K-M-FB FULL BLACK 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. The full black design makes the module appearance outstanding and ideal for building installations.



### 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 3.2mm tempered glass, the module has stronger performance under low light circumstances.

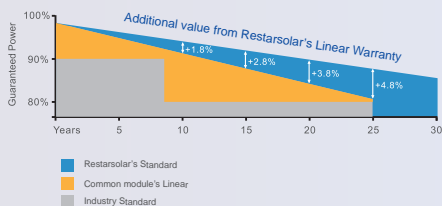


### High Mechanical Strength

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



## 0.5% Annual Degradation over 30 years



### LINEAR PERFORMANCE WARRANTY

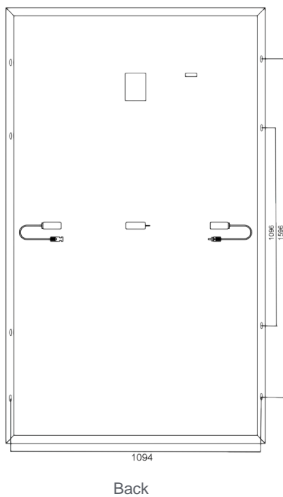
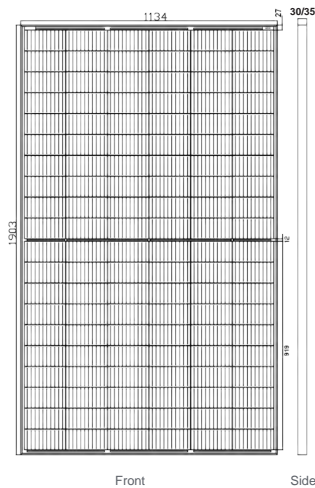
**15 Year Product Warranty**

**30 Year Linear Power Warranty**

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



Dimension of PV Modules Unit: mm



### ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	470	475	480	485	490	495
Open Circuit Voltage-Voc(V)	41.78	41.93	42.08	42.23	42.38	42.53
Short Circuit Current-Isc(A)	14.17	14.25	14.31	14.37	14.43	14.49
Maximum Power Voltage-Vmp(V)	34.49	34.63	34.77	34.91	35.05	35.19
Maximum Power Current-Imp(A)	13.63	13.72	13.79	13.85	13.92	13.99
Module Efficiency	21.78%	22.01%	22.24%	22.47%	22.71%	22.94%

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

### ELECTRICAL DATA(NOCT)

Maximum Power-Pmax(Wp)	349	353	357	360	364	368
Open Circuit Voltage-Voc (V)	39.40	39.54	39.68	39.82	39.96	40.11
Short Circuit Current-Isc(A)	11.45	11.51	11.56	11.61	11.66	11.71
Maximum Power Voltage-Vmp(V)	32.32	32.45	32.58	32.71	32.84	32.97
Maximum Power Current-Imp(A)	10.81	10.88	10.95	11.02	11.09	11.15

NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

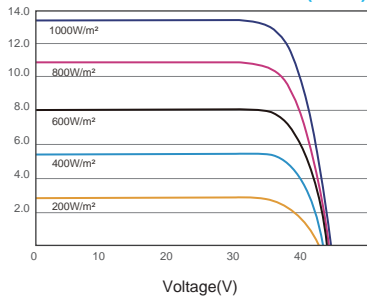
### MECHANICAL DATA

Solar cells	Mono-crystalline 182*91mm,9/10/16 Bus bars
Cell configuration	120cells(6*20)
Module dimensions	1903*1134*30/35mm
Weight	23.9/24.8kg
Front Cover	3.2mm Tempered Glass
J-BOX	IP68
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL),300mm+300mm(or customized )
Connectors	MC4 or MC4 Comparable
Standard Packaging	36/31pcs/pallet

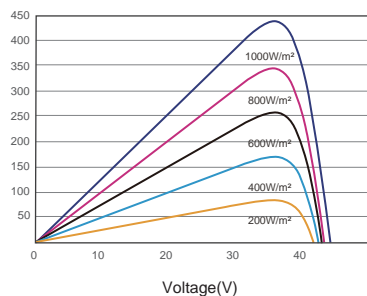
### TEMPERATURE & MAXIMUM RATINGS

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	25A
Limiting Reverse Current	25A

I-V CURVES OF PV MODULE(480W)



P-V CURVES OF PV MODULE(480W)



### PACKAGING CONFIGURATION

Number of modules per container	864/744 pcs/40HQ
Package	36/31 pcs/pallet
Package Number	24 pallets

Add: No: 30 Yongshun Road, Zhulin Town, Jintan District, Changzhou, Jiangsu Province, China  
 Email: info@restarsolar.com  
 Web: www.restarsolar.com

MADE IN CHINA