

# RT8I-M-BD

**144 Cells**

Mono N-Type/Topcon 16 BB

**540-560W**

Power output

**21.67%**

The Highest Efficiency

**0 ~ +5W**

Tolerance

WWW.RESTARSOLAR.COM

## RT8I-M-BD

RT8I-M-BD TOPCON/N-TYPE 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.



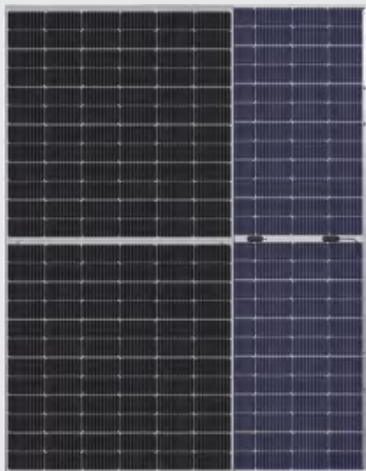
### Low-Light Performance

With high transmittance and anti-reflective 3.2mm tempered glass, the module has stronger performance under low light circumstances.

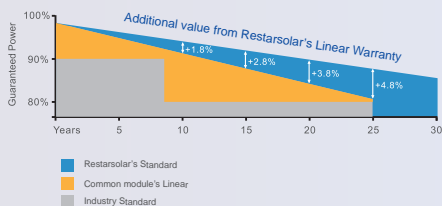


### High Mechanical Strength

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



## 0.5% Annual Degradation over 30 years



### LINEAR PERFORMANCE WARRANTY

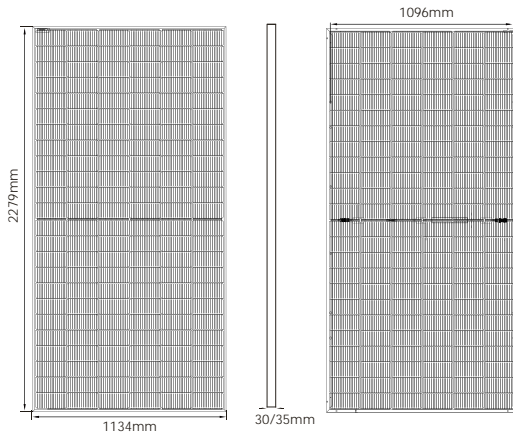
**15 Year Product Warranty**

**30 Year Linear Power Warranty**

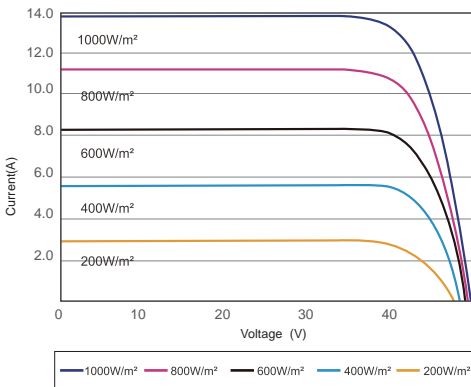
ISO 9001/14001 TUV PID-FREE CE IEC 61215/61730/61701/62716



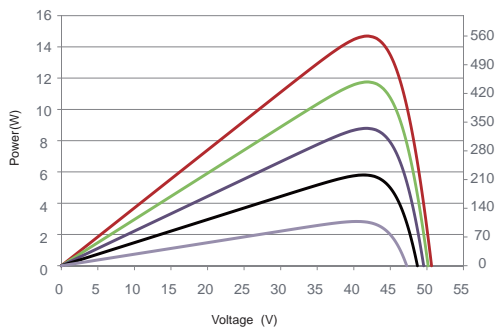
Dimension of PV Modules Unit: mm



I-V CURVES OF PV MODULE



P-V CURVES OF PV MODULE



### ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	540	545	550	555	560
Open Circuit Voltage-Voc(V)	49.60	49.75	49.90	49.98	50.05
Short Circuit Current-Isc(A)	13.86	13.93	14.00	14.03	14.07
Maximum Power Voltage-Vmp(V)	41.64	41.80	41.96	42.06	42.12
Maximum Power Current-Imp(A)	12.97	13.04	13.11	13.19	13.30
Module Efficiency	20.89%	21.09%	21.28%	21.48%	21.67%

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)	408	412	416	420	424
Open Circuit Voltage-Voc (V)	46.43	46.55	46.68	46.78	46.85
Short Circuit Current-Isc(A)	11.09	11.13	11.17	11.20	11.24
Maximum Power Voltage-Vmp(V)	38.99	39.2	39.43	39.62	39.67
Maximum Power Current-Imp(A)	10.47	10.51	10.55	10.60	10.69

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

### BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum Power(pmax)	567	572	578	583	588
	Module Efficiency STC	21.9%	22.1%	22.3%	22.5%	22.8%
10%	Maximum Power(pmax)	621	627	633	638	644
	Module Efficiency STC	24.0%	24.3%	24.5%	24.7%	24.9%
15%	Maximum Power(pmax)	675	681	688	694	700
	Module Efficiency STC	26.1%	26.4%	26.6%	26.8%	27.1%

### MECHANICAL DATA

Solar cells	Mono-crystalline 182*91mm,9/10/16 Bus bars
Cell configuration	144cells(6*24)
Module dimensions	2279*1134*30mm/35mm
Weight	27.2kg/28.6kg
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	37/31pcs/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	30A
Limiting Reverse Current	30A

### PACKAGING CONFIGURATION

Number of modules per container	740/620 pcs/40HQ
Package	37/31 pcs/pallet
Package Number	20 pallets