

**BIFACIAL MODULE WITH  
DOUBLE GLASS**

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# RT8I-M-DG

**144 Cells**

N-type Topcon Mono 16 Bus bars

**565-590W**

Power Output

**22.84%**

The Highest Efficiency

**0~+5W**

Tolerance

# RT8I-M-DG

**RT8I-M-DG HALF-CELL** series is produced with N-type Topcon high efficiency MBB 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.



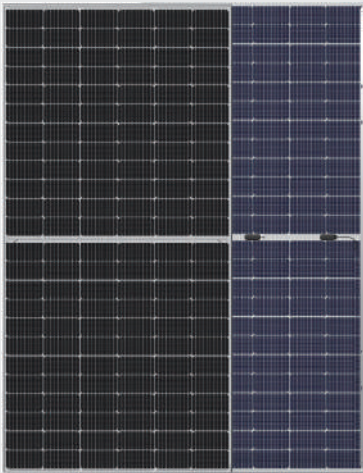
## Low-Light Performance

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

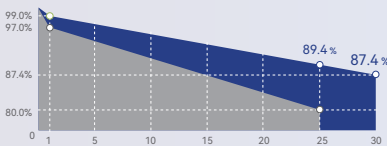


## High Mechanical Strength

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



0.40% Annual Degradation  
1.00% 1st-year Degradation



Standard Module Linear Performance Warranty  
RESTAR TOPCON Module Linear Performance Warranty

LINEAR PERFORMANCE WARRANTY

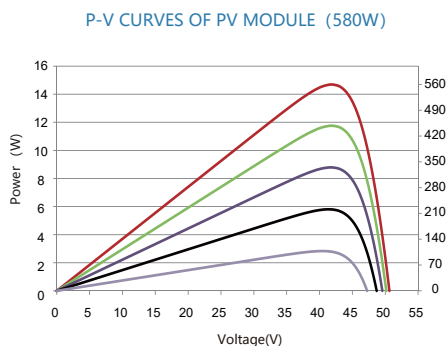
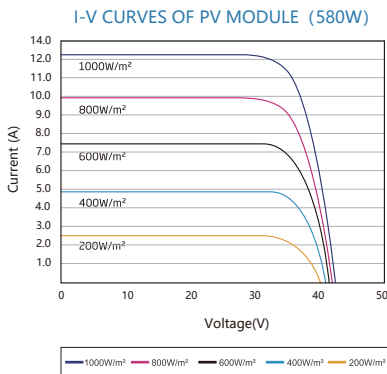
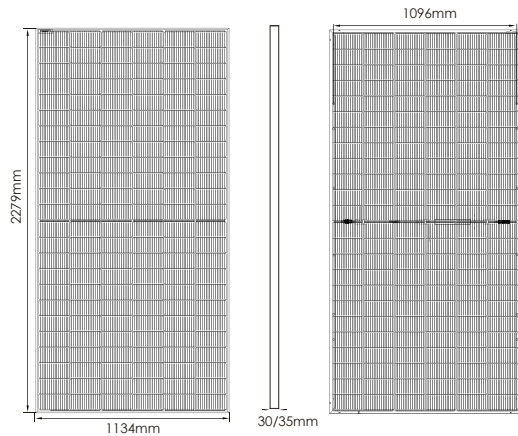
**15 Year Product Warranty**

**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)	565W	570W	575W	580W	585W	590W
Open Circuit Voltage-Voc(V)	50.20	50.35	50.50	50.65	50.80	50.95
Short Circuit Current-Isc(A)	14.14	14.21	14.28	14.35	14.42	14.49
Maximum Power Voltage-Vmp(V)	42.26	42.42	42.57	42.72	42.87	43.01
Maximum Power Current-Imp(A)	13.37	13.44	13.51	13.58	13.65	13.72
Module Efficiency(%)	21.87%	22.07%	22.26%	22.45%	22.65%	22.84%

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)	428W	432W	436W	440W	444W	448W
Open Circuit Voltage-Voc (V)	46.98	47.11	47.33	47.46	47.59	47.72
Short Circuit Current-Isc(A)	11.28	11.32	11.36	11.40	11.44	11.48
Maximum Power Voltage-Vmp(V)	39.88	40.09	40.30	40.51	40.62	40.83
Maximum Power Current-Imp(A)	10.73	10.79	10.82	10.87	10.93	10.97

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)	593W	599W	604W	609W	614W	620W
	Module Efficiency STC(%)	23.0%	23.2%	23.4%	23.6%	23.8%	24.0%
10%	Maximum Power(pmax)	650W	656W	661W	667W	673W	679W
	Module Efficiency STC(%)	25.1%	25.4%	25.6%	25.8%	26.0%	26.3%
15%	Maximum Power(pmax)	706W	713W	719W	725W	731W	738W
	Module Efficiency STC(%)	27.3%	27.6%	27.8%	28.1%	28.3%	28.5%

## MECHANICAL DATA

Solar Cells	Mono-crystalline 182*91mm, 16 Bus bars
Cell Configuration	144cells(6*24)
Module Dimensions	2279*1134*35mm/30mm
Weight	32/31.5kg
Front Cover	2.0+2.0mm Tempered Glass
J-Box	IP68
Cable	4mm <sup>2</sup> (IEC)/12AWG(UL), 350mm+450mm
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	30A
Limiting Reverse Current	30A

## PACKAGING CONFIGURATION

	40HQ
Number of modules per container	620/720pcs
Package	31/36pcs/pallet
Package Nuber	20pallets
Package Weight	1032/1174kg/pallet
Package Dimension	2310*1130*1270mm/pallet

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