

RT8V-M-DG

108 Cells

Mono Topcon 16BB

430-460W

Power output

23.02%

The Highest Efficiency

±3%

Tolerance of Power, Voc, ISC

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RT8V-M-DG TOPCON

RT8V-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.



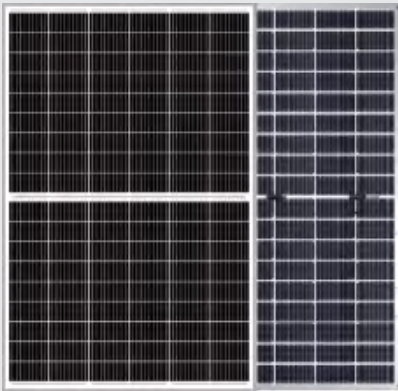
Low-Light Performance

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

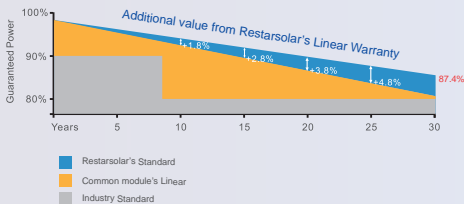


High Mechanical Strength

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



0.42% Annual Degradation over 30 years



LINEAR PERFORMANCE WARRANTY

15 Year Product Warranty

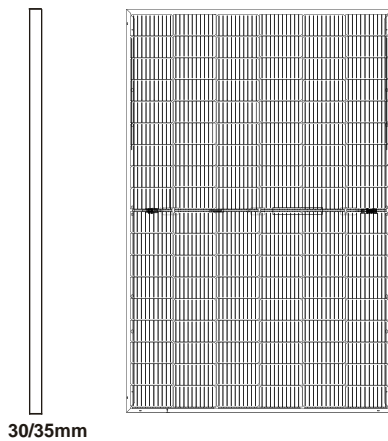
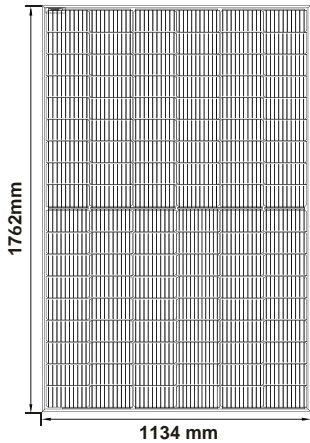
30 Year Linear Power Warranty

Full range of products and certification systems

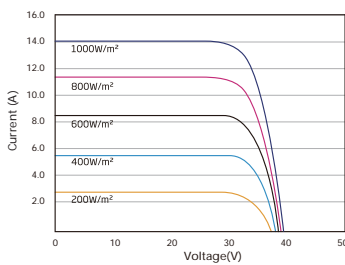
ISO 9001/14001 TUV PID-FREE CE IEC 61215/61730/61701/62716



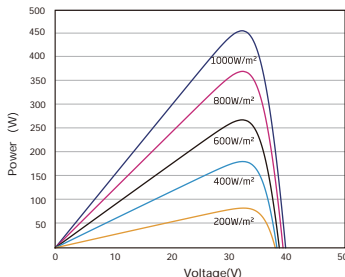
Dimension of PV Modules Unit: mm



I-V CURVES OF PV MODULE



P-V CURVES OF PV MODULE



ELECTRICAL DATA(STC)

Rated Power in Watts-Pmax(Wp)	430	435	440	445	450	455	460
Open Circuit Voltage-Voc(V)	38.35	38.55	38.75	38.95	39.15	39.35	39.55
Short Circuit Current-Isc(A)	14.31	14.38	14.45	14.52	14.59	14.66	14.72
Maximum Power Voltage-Vmp(V)	31.96	32.16	32.34	32.54	32.74	32.94	33.13
Maximum Power Current-Imp(A)	13.46	13.53	13.61	13.68	13.75	13.82	13.89
Module Efficiency	21.52%	21.77%	22.02%	22.27%	22.52%	22.77%	23.02%

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	343	347	351
Open Circuit Voltage-Voc (V)	35.93	36.12	36.31	36.50	36.68	36.87	37.06
Short Circuit Current-Isc(A)	11.56	11.62	11.68	11.73	11.79	11.85	11.89
Maximum Power Voltage-Vmp(V)	29.98	30.17	30.33	30.52	30.71	30.90	31.08
Maximum Power Current-Imp(A)	10.91	10.97	11.04	11.11	11.17	11.23	11.29

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

INTEGRATED PWER @ STC (REFERENCE TO 10%)

Rated Power in Watts-Pmax(Wp)	473	479	484	490	495	501	506
Open Circuit Voltage-Voc(V)	38.35	38.55	38.75	38.95	39.15	39.35	39.55
Short Circuit Current-Isc(A)	15.73	15.83	15.89	15.98	16.04	16.13	16.19
Maximum Power Voltage-Vmp(V)	31.96	32.16	32.34	32.54	32.74	32.94	33.13
Maximum Power Current-Imp(A)	14.80	14.89	14.97	15.06	15.12	15.21	15.27
Module Efficiency(%)	23.67%	23.97%	24.22%	24.52%	24.77%	25.07%	25.32%
BNPI/Isc(BSI)	17.74	17.83	17.92	18.00	18.09	18.18	18.25

MECHANICAL DATA

Solar cells	Mono-crystalline 182*94mm, 16 Bus bars
Cell configuration	108cells(6*18)
Module dimensions	1762*1134*30mm/35mm
Weight	24.3kg/24.9kg
Front Cover	2.0+2.0mm Tempered Glass
J-BOX	IP68
Cable	4mm²(IEC)/12AWG(UL), 300mm+300mm
Connectors	MC4 or MC4 Comparable
Standard Packaging	37/31 pcs/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	-0.29%/ C
Operational Temperature	-40~+85 C
Maximum System Voltage	1500V(IEC)/1500V(UL)
Max Series Fuse Rating	25A
Limiting Reverse Current	25A

PACKAGING CONFIGURATION

Number of modules per container	962/806 pcs/40HQ
Package	37/31 pcs/pallet
Package Number	26 pallets