

# M10R CELLS TOPCON MODULE

RPS2MH72BDXXX

BIFACIAL  
580-610W

- 

**30**  
YEARS  
POWER  
WARRANTY
- 

UPTO  
**80%**  
BIFACIALITY  
FACTOR
- 

N-TYPE  
TOPCON
- 

ALMM  
APPROVED

### Comprehensive System Certifications

- ISO 9001:2015: Quality Management system
- ISO 14001:2015: Environment Management system
- ISO 45001:2018: Occupational health and safety

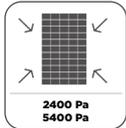





**Advanced TOPCon technology**  
16 busbars to minimize micro-crack impacts / Half cut / M10R cell / Smart soldering / Zero LID



**Tough modules for harsh weather**  
Tested to withstand extended wind load (2400 Pa) and snow load (5400 Pa)



**Robust performance**  
1% 1<sup>ST</sup> year degradation,  
Excellent PID resistance performance



**High performance tolerance**  
Excellent low light performance on cloudy or rainy days / Low temperature coefficient for stable performance in hot climates



**610W**

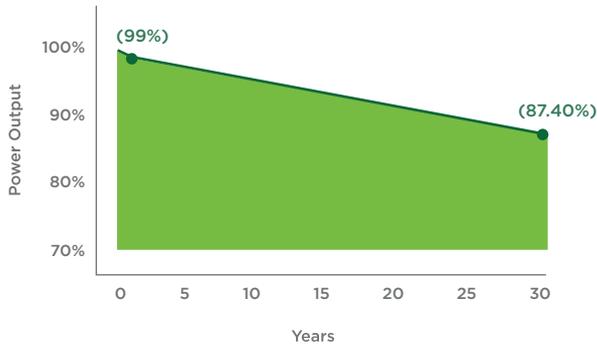
MAXIMUM POWER OUTPUT

**23.61%**

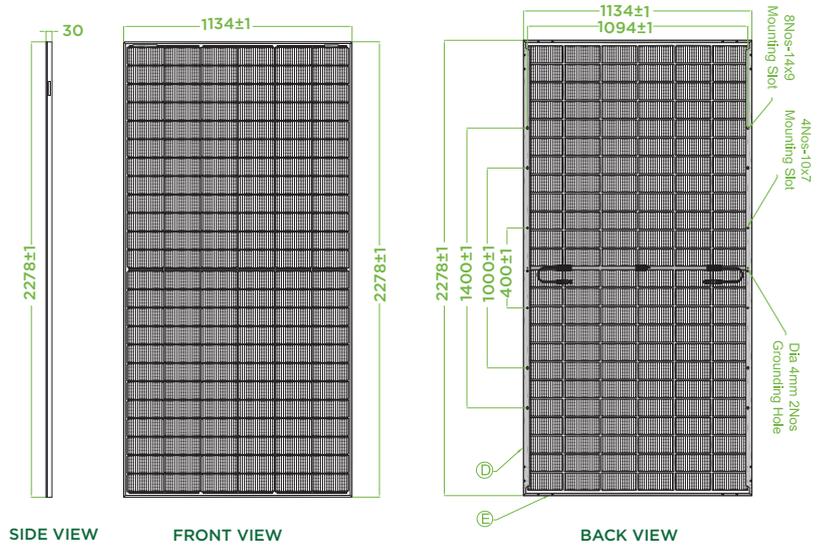
MAXIMUM EFFICIENCY

**0~+5W**

POSITIVE POWER TOLERANCE

**1% FIRST YEAR POWER DEGRADATION****0.40% SUBSEQUENT ANNUAL POWER DEGRADATION****GUARANTEED POWER****30-year power warranty**

\*Please refer to the Warranty Document for details

**ELECTRICAL DATA****Electrical Data (STC)**

Peak Power- $P_{MAX}$ (Wp)*	580	585	590	595	600	605	610
Power Tolerance - $P_{MAX}$ (W)	0 - +5						
Max Power Voltage - $V_{MPP}$ (V)	45.07	45.14	45.22	45.29	45.36	45.43	45.50
Max Power Current - $I_{MPP}$ (A)	12.87	12.96	13.05	13.14	13.23	13.32	13.41
Open Circuit Voltage - $V_{OC}$ (V)	53.74	53.81	53.87	53.94	54.02	54.10	54.13
Short Circuit Current - $I_{SC}$ (A)	13.46	13.55	13.66	13.75	13.84	13.92	14.05
Module Efficiency - $\eta_m$ (%)	22.45	22.65	22.84	23.03	23.23	23.42	23.61

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Measuring Tolerance: ±3%**Electrical Data (NOCT)**

Maximum Power - $P_{MAX}$ (Wp)	442	445	450	451	455	459	463
Maximum Power Voltage- $V_{MPP}$ (V)	42.77	42.84	42.89	42.96	43.04	43.11	43.12
Maximum Power Current- $I_{MPP}$ (A)	10.34	10.41	10.50	10.52	10.59	10.66	10.75
Open Circuit Voltage - $V_{OC}$ (V)	51.13	51.19	51.21	51.36	51.37	51.44	51.47
Short Circuit Current- $I_{SC}$ (A)	10.90	10.97	11.06	11.08	11.16	11.22	11.32

**MECHANICAL DATA**

Solar Cells	Bifacial TOPCon
No. of cells	144 Half cut
Module Dimensions	2278 × 1134 × 30 mm
Weight	31.5 kg
Front Glass	2 mm, High Transmission glass, Tempered ARC glass
Encapsulant	EPE / EVA
Rear Cover	2 mm, High Transmission glass
Frame	30 mm, Anodized Aluminum
Junction Box	IP68 / IP67
Cable <sup>^</sup>	4.0 mm <sup>2</sup> , Cable length 300 mm (Positive and Negative)
Connector <sup>*</sup>	MC4 / MC4 Compatible

\* Please connect with the sales team for final connector details.  
<sup>^</sup> Cable length can be customised.**Temperature rating**

NOCT	45°C (±2°C)
Temperature Coefficient of $P_{MAX}$	- 0.29%/°C
Temperature Coefficient of $V_{OC}$	- 0.25%/°C
Temperature Coefficient of $I_{SC}$	0.06%/°C
Max Series Fuse rating	30A

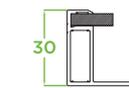
**WARRANTY**

12-year Product Workmanship Warranty
30-year Power Warranty
1% First Year Degradation
0.40% Annual Power Attenuation

**PACKING CONFIGURATION**

Modules per box: 36 pieces
Modules per 40' HC container: 720 pieces

PRELIMINARY DATASHEET

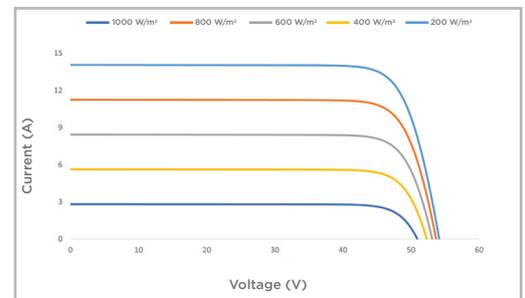
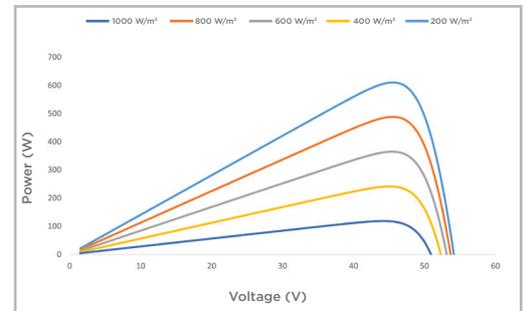


FRAME DETAILS (D)



FRAME DETAILS (E)

All dimensions are in mm

**IV Curve****PV Curve****CAUTION:**  
READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

Specifications included in this datasheet are subject to change without notice.

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