

N-type i-TOPCon

BIFACIAL DUAL GLASS MONOCRYSTALLINE MODULE

TSM-NEG9M4C.26 280-300W

300_W / MAXIMUM POWER OUTPUT

18.3% / MAXIMUM EFFICIENCY



Our Most Versatile Replacement Module

- Drop-in replacement for legacy Trina Solar Honey and similar 60-cell modules, with compatibility across old and new inverters
- Enables reboosting with the latest N-type i-TOPCon technology while keeping existing mounting structures
- Certified to withstand 5400 Pa positive and 2400 Pa negative loads in extreme wind, snow, and weather conditions



Space-Saving Design for Complex Scenarios

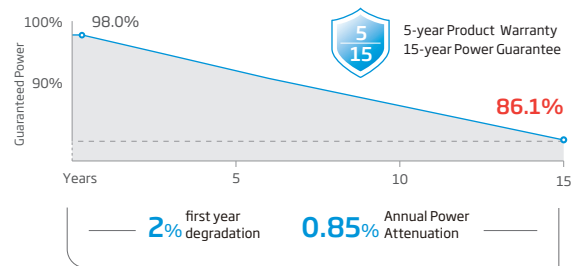
- Compact size (1.65 × 0.99 m) and low weight enable easy installation in tight or space-limited areas
- Ideal for complex scenarios with multiple angles, obstructions, or frequent shading
- Translucent design with around 20% transmittance suitable for light required environments



Proven Reliability and High Energy Gain

- Excellent high-temperature performance with a low temperature coefficient of -0.29%/°C
- Certified under IEC standards and tested to rigorous internal quality protocols for safe, reliable operation in harsh conditions
- Higher bifaciality, with up to 10~20% additional power gain from back side depending on albedo

Performance Warranty



* Please refer to product warranty for details

Comprehensive Products and System Certificates

IEC61215/IEC61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

OHSAS 18001: Occupational Health and Safety Management System



ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}(W_p)^*$	280	285	290	295	300
Power Selection (W)**	0 ~ +5				
Maximum Power Voltage- $V_{MPP}(V)$	33.0	33.4	33.8	34.2	34.6
Maximum Power Current- $I_{MPP}(A)$	8.49	8.54	8.58	8.63	8.67
Open Circuit Voltage- $V_{oc}(V)$	39.8	40.0	40.2	40.5	40.9
Short Circuit Current- $I_{sc}(A)$	8.89	8.94	9.02	9.10	9.17
Module Efficiency $\eta_m(\%)$	17.1	17.4	17.7	18.0	18.3

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%. **Power selection up to: +3%.

ELECTRICAL DATA (NOCT)

Peak Power Watts- $P_{MAX}(W_p)$	215	218	222	224	228
Maximum Power Voltage- $V_{MPP}(V)$	31.6	31.9	32.1	32.3	32.6
Maximum Power Current- $I_{MPP}(A)$	6.79	6.84	6.90	6.95	7.00
Open Circuit Voltage- $V_{oc}(V)$	38.0	38.2	38.5	38.6	38.8
Short Circuit Current- $I_{sc}(A)$	7.17	7.22	7.29	7.33	7.39

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

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of P_{MAX}	-0.29% /°C
Temperature Coefficient of V_{oc}	-0.24% /°C
Temperature Coefficient of I_{sc}	0.04% /°C

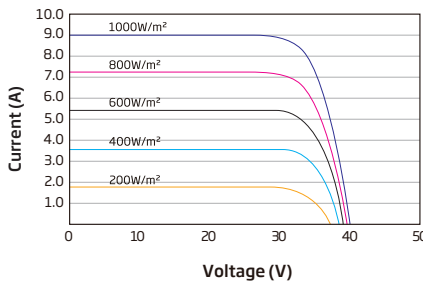
Due to different testing methods, the actual performances might differ from the declared specifications.

APPLICATION CONDITIONS

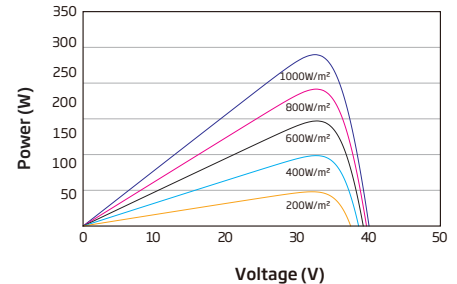
Operating Temperature	-40 ~ +70°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	20A

CURVES OF PV MODULE

I-V CURVES OF PV MODULE (290W)



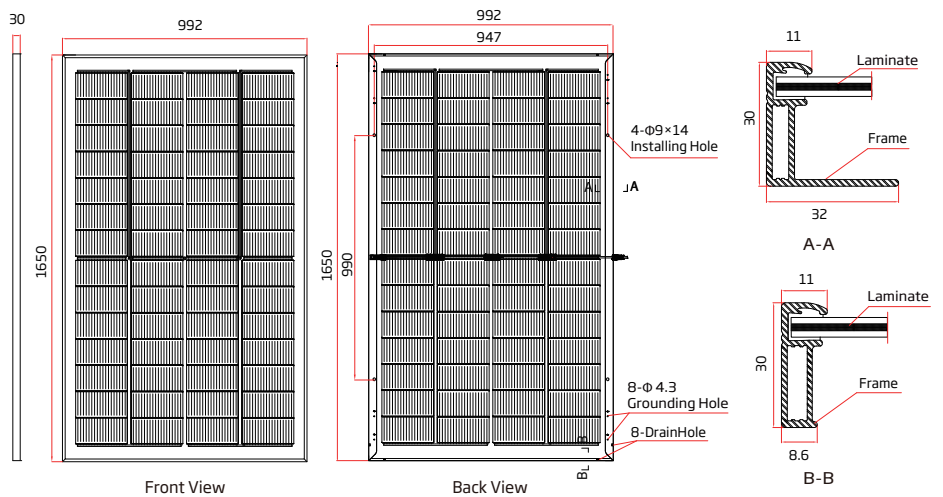
P-V CURVES OF PV MODULE (290W)



MECHANICAL DATA

Solar Cells	N-type i-TOPCon Monocrystalline
No. of cells	56 cells
Module Dimensions	1650×992×30 mm (64.96×39.06×1.18inches)
Weight	21.0 kg (46.30 lb)
Front Glass	2.0 mm (0.08 inches), AR Coating Strengthened Glass
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass
Frame	30mm (1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Length can be customized
Connector	MC4 EV02 / TS4 Plus / TS4*
Packaging	Modules per box: 36 pieces Modules per 40' container: 1008 pieces

*Please refer to regional datasheet for specified connector.



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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