



N-type i-TOPCon

BACKSHEET MONOCRYSTALLINE MODULE

TSM-NE21 695-725W

725_W / MAXIMUM
POWER OUTPUT

23.3% / MAXIMUM
EFFICIENCY



High customer value

- Suitable for all scenario, including residential, C&I and utility applications
- Standardized module size with higher container space utilization, leading to significantly lower freight cost
- Low Voltage design with higher string power, effectively reducing BOS (Balance of System) and LCOE (Levelized Cost of Energy) by 2%~6%, compared with conventional technology



High power up to 725W

- Up to 23.3% module efficiency, on 210 innovative platform
- Patented i-TOPCon technology with continuous efficiency improvement, including contact resistance reduction, rear reflection enhancement and edge quality repairment



High reliability

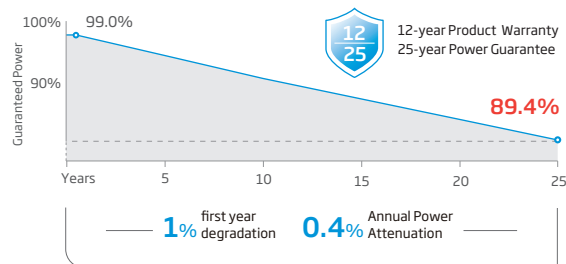
- Minimized micro-cracks with innovative non-destructive cutting technology, high-density packaging
- Reduced risks of hot-spot with half-cut technology
- Certified high resistance against salt, ammonia, sand, PID, LID, LeTID
- Sustainable in harsh environments and extreme weather conditions



High energy yield

- Excellent low irradiation performance, validated by 3rd party
- Lower temperature coefficient (-0.29%/C)

Performance Warranty



* Please refer to product warranty for details

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716

ISO 9001: Quality Management System

ISO 14001: Environmental Management System

ISO14064: Greenhouse Gases Emissions Verification

ISO45001: Occupational Health and Safety Management System



ELECTRICAL DATA (STC)

Peak Power Watts- $P_{MAX}(W_p)^*$	695	700	705	710	715	720	725
Power Selection (W)**	0 ~ +5						
Maximum Power Voltage- V_{MPP} (V)	40.3	40.5	40.7	40.9	41.1	41.3	41.5
Maximum Power Current- I_{MPP} (A)	17.25	17.29	17.33	17.36	17.40	17.44	17.47
Open Circuit Voltage- V_{oc} (V)	48.3	48.6	48.8	49.0	49.2	49.4	49.7
Short Circuit Current- I_{sc} (A)	18.28	18.32	18.36	18.40	18.44	18.48	18.49
Module Efficiency η_m (%)	22.4	22.5	22.7	22.9	23.0	23.2	23.3

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- $P_{MAX}(W_p)$	531	534	540	543	547	551	554
Maximum Power Voltage- V_{MPP} (V)	37.9	38.0	38.3	38.5	38.7	38.8	39.1
Maximum Power Current- I_{MPP} (A)	14.00	14.04	14.08	14.12	14.14	14.18	14.19
Open Circuit Voltage- V_{oc} (V)	45.9	46.1	46.3	46.5	46.7	46.9	47.2
Short Circuit Current- I_{sc} (A)	14.72	14.76	14.80	14.83	14.86	14.89	14.90

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

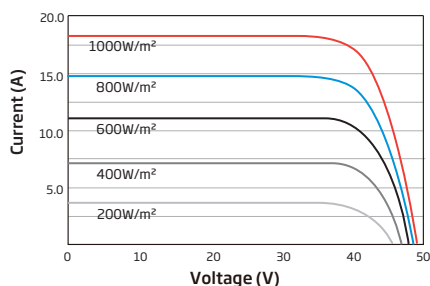
Operating Temperature -40~+70°C

Maximum System Voltage 1500V DC (IEC)

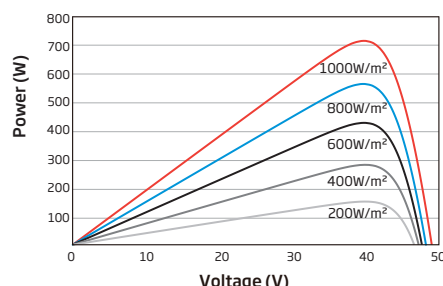
Max Series Fuse Rating 30A

CURVES OF PV MODULE

I-V CURVES OF PV MODULE (715W)



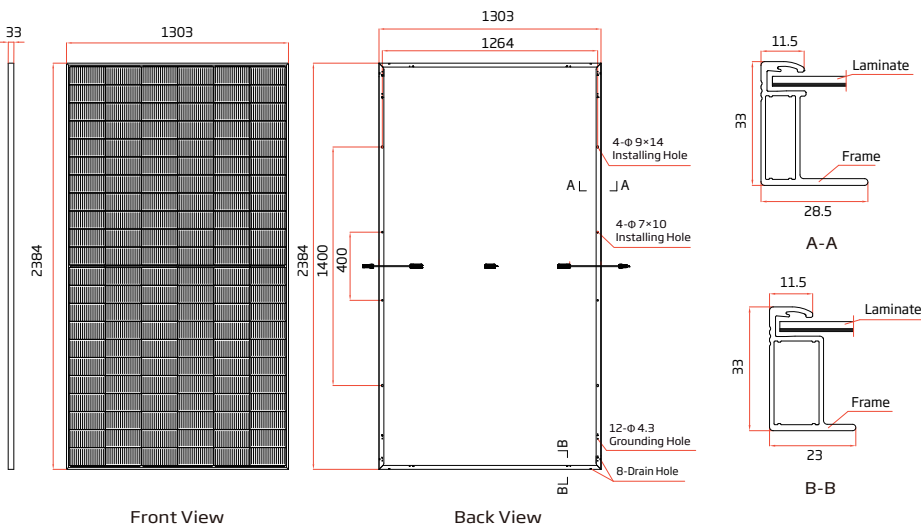
P-V CURVES OF PV MODULE (715W)



MECHANICAL DATA

Solar Cells	N-type i-TOPCon Monocrystalline
No. of cells	132 cells
Module Dimensions	2384×1303×33mm (93.86×51.30×1.30 inches)
Weight	32.9 kg (72.5 lb)
Front Glass	3.2mm (0.13inches), AR Coating Tempered Glass
Backsheet	White
Frame	33mm(1.30 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²) Portrait: 350/280 mm(13.78/11.02 inches) Length can be customized
Connector	MC4 EVO2 / TS4 Plus / TS4*
Packaging	Modules per box: 33pieces Modules per 40' container: 594 pieces

*Please refer to regional datasheet for specified connector.



www.trinasolar.com

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
© 2025 Trina Solar Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.
The right of final interpretation belongs to Trina Solar Co., Ltd.
Version number: TSM_EN_2025_A