Vertex N

N-type i-TOPCon

BACKSHEET MONOCRYSTALLINE MODULE

TSM-NE21 **695-720W**

720W / MAXIMUM POWER OUTPUT

23.2% / 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 720W

- Up to 23.2% 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

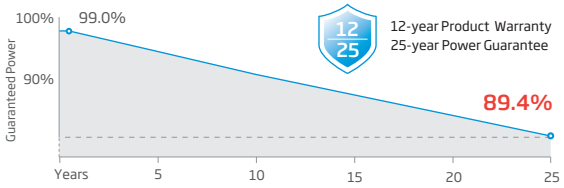
High reliability

- 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

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

Version number: TSM_EN_2024_A

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N-type i-TOPCon BACKSHEET MONOCRYSTALLINE MODULE

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX(Wp)*	695	700	705	710	715	720
Power Selection (W)**			0 ~ +5			
Maximum Power Voltage-VMPP (V)	40.3	40.5	40.7	40.9	41.1	41.3
Maximum Power Current-IMPP (A)	17.25	17.29	17.33	17.36	17.40	17.44
Open Circuit Voltage-VOC (V)	48.3	48.6	48.8	49.0	49.2	49.4
Short Circuit Current-ISC (A)	18.28	18.32	18.36	18.40	18.44	18.48
Module Efficiency η m (%)	22.4	22.5	22.7	22.9	23.0	23.2

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

ELECTRICAL DATA (NOCT)

Peak Power Watts-PMAX(Wp)	531	534	540	543	547	551
Maximum Power Voltage-VMPP (V)	37.9	38.0	38.3	38.5	38.7	38.8
Maximum Power Current-IMPP (A)	14.00	14.04	14.08	14.12	14.14	14.18
Open Circuit Voltage-VOC (V)	45.9	46.1	46.3	46.5	46.7	46.9
Short Circuit Current-ISC (A)	14.72	14.76	14.80	14.83	14.86	14.89

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

TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43℃ (±2℃)
Temperature Coefficient of PMAX	- 0.29% /℃
Temperature Coefficient of VOC	- 0.24% /℃
Temperature Coefficient of ISC	0.04% /℃

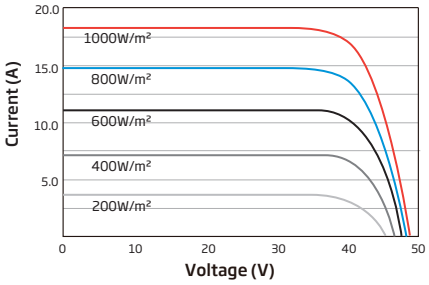
Due to different testing methods, the actual performances might differ from the declared specifications.

MAXIMUM RATINGS

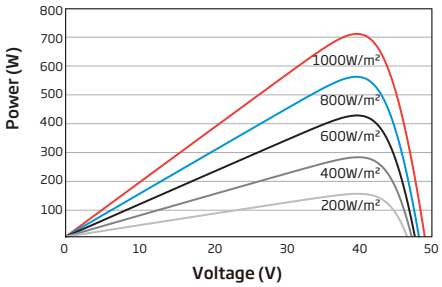
Operational Temperature	-40~+85℃
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	30A

CURVES OF PV MODULE

I-V CURVES OF PV MODULE (705W)



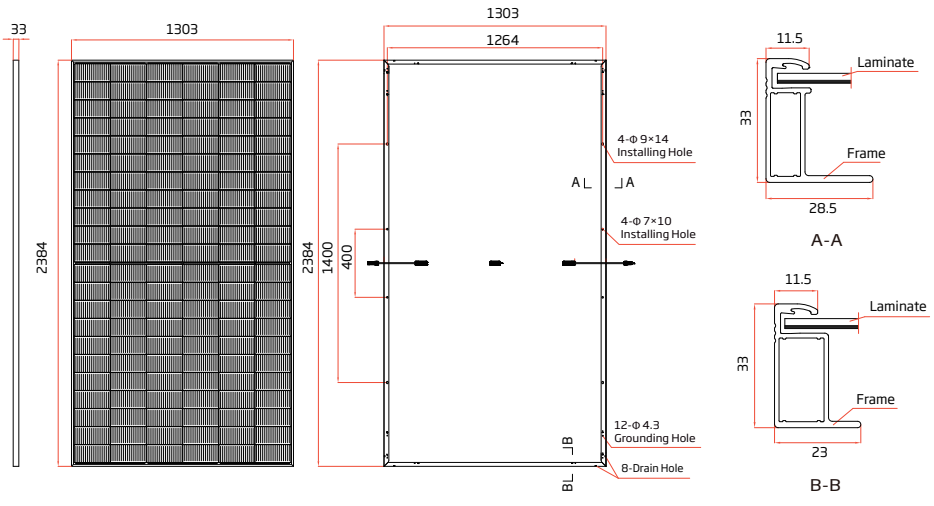
P-V CURVES OF PV MODULE (705W)



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 4.0mm² (0.006 inches²) 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.



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