

PRODUCT: TSM-XXXDE09.08

POWER RANGE: 390-405W

405W+

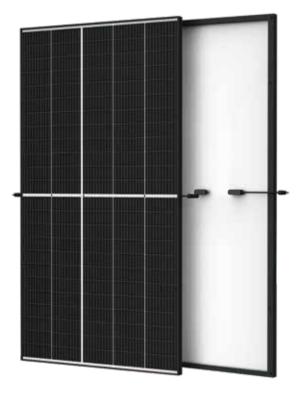
MAXIMUM POWER OUTPUT

0~+5W

**BINNING TOLERANCE** 

21.1%

**MAXIMUM EFFICIENCY** 





# Small in size, big on power

- Small form factor. Generate a huge amount of energy even in limited space. Up to 405W, 21.1% module efficiency with high density interconnect technology
- Mono Perc Cell and Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection
- Reduce installation cost with higher power bin and efficiency
- Boost performance in warm weather with lower temperature coefficient (-0.34%) and operating temperature



## Universal solution for residential and C&I rooftops

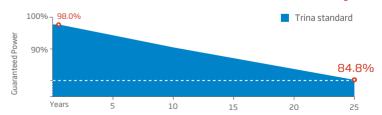
- Designed for compatibility with existing mainstream optimizers, inverters and mounting systems
- Perfect size and low weight. Easy for handling. Economy for transporting
- Diverse installation solutions. Flexible for system deployment



# **High Reliability**

- 15 year product warranty
- 25 year performance warranty with lowest degradation;
- Fire Class rating C

# Trina Solar's Backsheet Performance Warranty



### **Comprehensive Products and System Certificates**













ISO 9001: Quality Management System

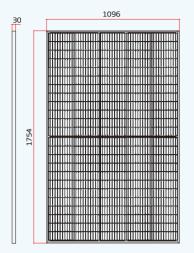
ISO 14001: Environmental Management System ISO14064: Greenhouse Gases Emissions Verification

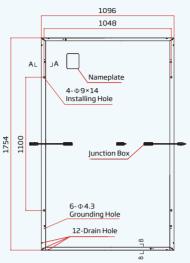
ISO45001: Occupational Health and Safety Management System

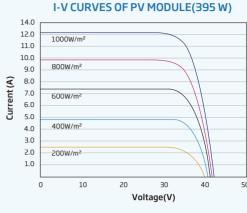




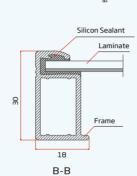
### **DIMENSIONS OF PV MODULE(mm)**



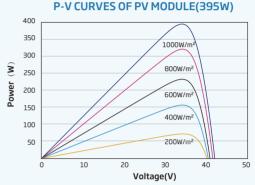




# Front View Silicon Sealant Laminate 30 Frame 33 A-A



# P-V CURVES OF PV MODULE(395W)



### ELECTRICAL DATA (STC) - TSM-XXXDE09.08(XXX=390-405)

Peak Power Watts-PMAX (Wp)*	390	395	400	405
Binning Tolerance-PMAX (W)	0~+5			
Maximum Power Voltage-VMPP (V)	33.8	34.0	34.2	34.4
Maximum Power Current-Impp (A)	11.54	11.62	11.70	11.77
Open Circuit Voltage-Voc (V)	40.8	41.0	41.2	41.4
Short Circuit Current-Isc (A)	12.14	12.21	12.28	12.34
Module Efficiency η m (%)	20.3	20.5	20.8	21.1

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

### **ELECTRICAL DATA (NOCT)**

Maximum Power-PMAX (Wp)	295	298	302	306
Maximum Power Voltage-V <sub>MPP</sub> (V)	31.8	32.0	32.2	32.5
Maximum Power Current-Impp (A)	9.26	9.32	9.38	9.41
Open Circuit Voltage-Voc (V)	38.4	38.6	38.8	38.9
Short Circuit Current-Isc (A)	9.78	9.84	9.90	9.95

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

### MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	120 cells
Module Dimensions	1754×1096×30 mm (69.06×43.15×1.18 inches)
Weight	21.0 kg (46.3 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Backsheet	White
Frame	30mm(1.18 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 280/280 mm(11.02/11.02 inches) Landscape: 1100/1100 mm(43.31/43.31 inches)
Connector	MC4 EVO2/TS4

# TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2°C)
Temperature Coefficient of PMAX	- 0.34%/°C
Temperature Coefficient of Voc	- 0.25%/°C
Temperature Coefficient of Isc	በ በ4%/°ር

Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IE

MAXIMUMRATINGS

1500V DC (IEC) Max Series Fuse Rating\* 20A / 25A \*Default 20A / 25A upon special request

### WARRANTY

15 year Product Workmanship Warranty 25 year Power Warranty 2% first year degradation 0.55% Annual Power Attenuation

se refer to product warranty for details)

### PACKAGING CONFIGUREATION

Modules per box: 36 pieces Modules per 40' container: 936 pieces

