Mono

Preliminary



PRODUCT: TSM-DE19

PRODUCT RANGE: 530-555W

555W+

MAXIMUM POWER OUTPUT

0~+5W

POSITIVE POWER TOLERANCE

21.2%

MAXIMUM EFFICIENCY



High customer value

- Lower LCOE (Levelized Cost Of Energy), reduced BOS (Balance of System) cost, shorter payback time
- Lowest guaranteed first year and annual degradation;
- Designed for compatibility with existing mainstream system components
- Higher return on Investment



High power up to 555W

- Up to 21.2% module efficiency with high density interconnect
- Multi-busbar technology for better light trapping effect, lower series resistance and improved current collection



High reliability

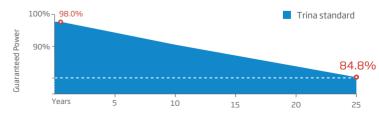
- Minimized micro-cracks with innovative non-destructive cutting technology
- Ensured PID resistance through cell process and module material
- Mechanical performance up to 5400 Pa positive load and 2400 Pa negative load



High energy yield

- Excellent IAM (Incident Angle Modifier) and low irradiation performance, validated by 3rd party certifications
- The unique design provides optimized energy production under inter-row shading conditions
- Lower temperature coefficient (-0.34%) and operating temperature

Trina Solar's Backsheet Performance Warranty



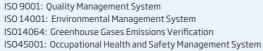
Comprehensive Products and System Certificates











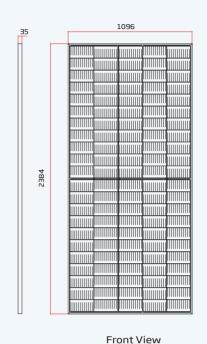
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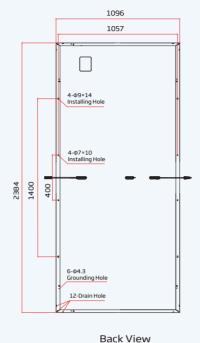


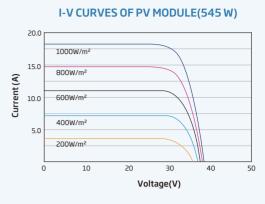




DIMENSIONS OF PV MODULE(mm)







P-V CURVES OF PV MODULE(545W) 500 1000W/m² 400 800W/m² 400W/m² 100 200 100 200 Voltage(V)

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	530	535	540	545	550	555
Power Tolerance-PMAX (W)			0)~+5		
Maximum Power Voltage-VMPP (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-IMPP (A)	17.21	17.28	17.33	17.37	17.40	17.45
Open Circuit Voltage-Voc (V)	37.1	37.3	37.5	37.7	37.9	38.1
Short Circuit Current-Isc (A)	18.31	18.36	18.41	18.47	18.52	18.56
Module Efficiency _n m (%)	20.3	20.5	20.7	20.9	21.0	21.2

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

ELECTRICAL DATA (NOCT)

Maximum Power-PMAX (Wp)	401	405	409	413	417	420
Maximum Power Voltage-VMPP (V)	28.6	28.8	29.0	29.2	29.3	29.5
Maximum Power Current-IMPP (A)	14.01	14.06	14.10	14.15	14.19	14.23
Open Circuit Voltage-Voc (V)	35.0	35.1	35.3	35.5	35.7	35.9
Short Circuit Current-Isc (A)	14.76	14.80	14.84	14.88	14.92	14.96

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

MECHANICAL DATA

Solar Cells	Monocrystalline
No. of cells	110 cells
Module Dimensions	2384×1096×35 mm (93.86×43.15×1.38 inches)
Weight	28.6 kg (63.1 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	EVA/POE
Backsheet	White
Frame	35mm(1.38 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: 1400/1400 mm(55.12/55.12 inches)
Connector	MC4 EV02 / TS4*

^{*}Please refer to regional datasheet for specified connector

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

MAXIMUMRATINGS Operational Temperatur

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

WARRANTY

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

(Please refer to product warranty for details)

PACKAGING CONFIGUREATION

Modules per box: 31 pieces
Modules per 40' container: 620 pieces

