

TSM-DE08M.08(II)

# 120 HALF-CUT

**MONOCRYSTALLINE CELLS** 

360-380W

POWER OUTPUT RANGE

20.7%

**MAXIMUM EFFICIENCY** 

# 0/+5W

## **POSITIVE POWER TOLERANCE**

Founded in 1997, Trina Solar is the world's leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

# Comprehensive Products and System Certificates

IEC61215/IEC61730/UL1703 IEC61701: Salt Mist Corrosion IEC62716: Ammonia Corrosion IEC60068: Blowing Sand IS09001; IS014001; IS045001; IS014064





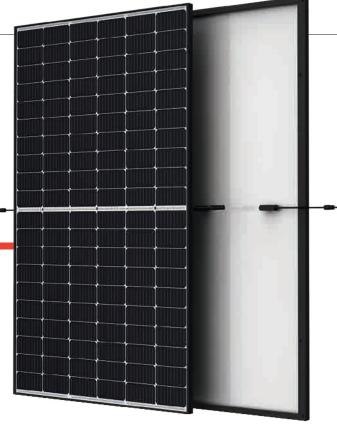














# High power output

- Multi busbar technology combined with half-cut mono PERC cells for up to 380W front power and 20.7% module efficiency
- Reduced BOS costs with higher power bins and 1,500V system voltage



# Great for residential rooftop application

- Maximize limited space with up to 207 W/m<sup>2</sup> power density
- Ultra-thin, virtually invisible busbars



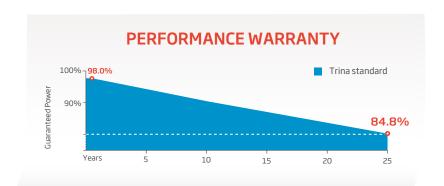
# Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 2x 100% inline EL inspection



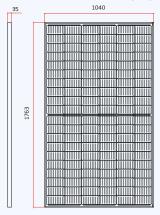
## Certified to withstand challenging environmental conditions

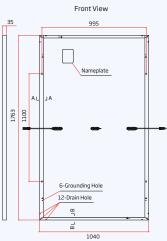
- Salt Mist Corrosion
- Ammonia Corrosion
- Blowing Sand

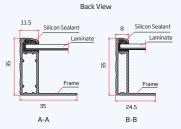




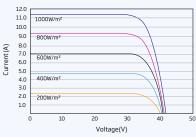
#### DIMENSIONS OF PV MODULE(mm)



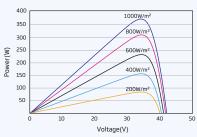




#### I-V CURVES OF PV MODULE(370W)



### P-V CURVES OF PV MODULE(370W)



ELECTRICAL DATA (STC)	TSM-360 DE08.M.08(II)	TSM-365 DE08.M.08(II)	TSM-370 DE08.M.08(II)	TSM-375 DE08.M.08(II)	TSM-380 DE08.M.08(II)
Peak Power Watts-PMAX (Wp)*	360	365	370	375	380
Power Tolerance-P <sub>MAX</sub> (W)	0/+5	0/+5	0/+5	0/+5	0/+5
Maximum Power Voltage-V <sub>MPP</sub> (V)	33.6	33.9	34.2	34.4	34.7
Maximum Power Current-I <sub>MPP</sub> (A)	10.70	10.76	10.82	10.89	10.96
Open Circuit Voltage-Voc (V)	40.7	41.0	41.3	41.6	41.9
Short Circuit Current-Isc (A)	11.24	11.30	11.37	11.45	11.52
Module Efficiency $\eta$ m (%)	19.6	19.9	20.2	20.5	20.7

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

ELECTRICAL DATA (NOCT)	TSM-360 DE08.M.08(II)	TSM-365 DE08.M.08(II)	<b>TSM-370</b> DE08.M.08(II)	<b>TSM-375</b> DE08.M.08(II)	TSM-380 DE08.M.08(II)
Maximum Power-P <sub>MAX</sub> (Wp)	271	275	279	283	287
Maximum Power Voltage-V <sub>MPP</sub> (V)	31.5	31.8	32.0	32.2	32.5
Maximum Power Current-Impp (A)	8.60	8.65	8.71	8.77	8.83
Open Circuit Voltage-Voc (V)	38.3	38.6	38.9	39.2	39.4
Short Circuit Current-Isc (A)	9.06	9.10	9.16	9.23	9.28

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

#### **MECHANICAL DATA**

Solar Cells	Monocrystalline
Cell Orientation	120 cells (6 × 20)
Module Dimensions	1763 × 1040 × 35 mm
Weight	20.0 kg
Glass	3.2 mm, High Transmission, AR Coated Heat Strengthened Glass
Encapsulant Material	EVA/POE
Backsheet	White
Frame	35 mm Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm <sup>2</sup> Portrait: N 280mm/P 280 mm  Landscape: N 1200 mm /P 1200 mm
Connector	MC4 EV02/TS4

### TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	43°C (±2 K)
Temperature Coefficient of PMAX	- 0.34%/K
Temperature Coefficient of Voc	- 0.25%/K
Temperature Coefficient of Isc	0.04%/K

### MAXIMUM RATINGS

Operational Temperature	-40 to +85°C	
Maximum System Voltage	1500V DC (IEC)	
Max Series Fuse Rating	20A	

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

#### WARRANTY

15 year Product Workmanship Warranty
25 year Power Warranty
Max. 2% first year degradation
Max. 0.55% Annual Power Degradation

(Please refer to product warranty for details)

#### PACKAGING CONFIGURATION

Modules per box: 31 pieces

Modules per 40'container: 806 pieces

