THE

# TALLMAX

FRAMED 144 LAYOUT MODULE

### **144 LAYOUT**

**MULTICRYSTALLINE MODULE** 

340-360W

**POWER OUTPUT RANGE** 

17.9%
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

IECG1215/IECG1730/UL1703/IECG1701/IECG2716
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupation Health and Safety
Management System











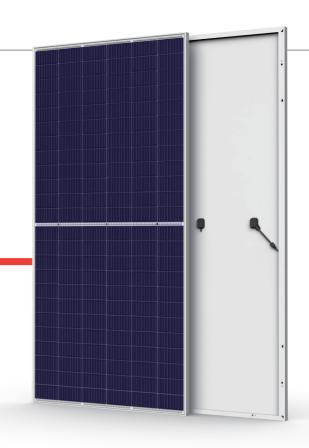






PRODUCTS
TSM-PE15M

POWER RANGE 340-360W





#### **High power**

- Up to 360W front power and 17.9% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power



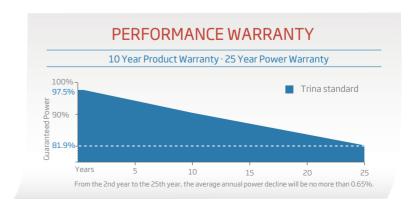
#### **High reliability**

- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load



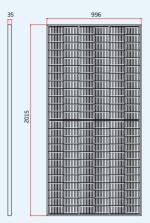
#### High energy generation

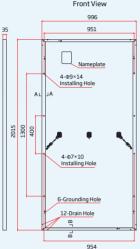
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Lower NMOT bring more energy leading to lower LCOE
- Better anti-shading performance and lower operating temperature

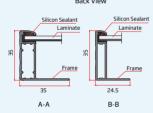




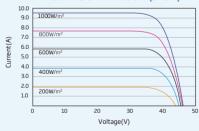
#### **DIMENSIONS OF PV MODULE(mm)**



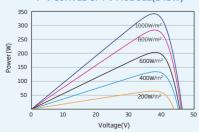




#### I-V CURVES OF PV MODULE(345W)



#### P-V CURVES OF PV MODULE(345W)



#### **ELECTRICAL DATA (STC)**

Peak Power Watts-P <sub>MAX</sub> (Wp)*	340	345	350	355	360
Power Output Tolerance-PMAX (W)	0~+5				
Maximum Power Voltage-V <sub>MPP</sub> (V)	37.5	37.7	37.9	38.1	38.3
Maximum Power Current-IMPP (A)	9.06	9.15	9.23	9.32	9.40
Open Circuit Voltage-Voc (V)	46.2	46.4	46.7	47.0	47.2
Short Circuit Current-Isc (A)	9.53	9.62	9.71	9.81	9.89
Module Efficiency η m (%)	16.9	17.2	17.4	17.7	17.9

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

#### **ELECTRICAL DATA (NMOT)**

Maximum Power-P <sub>MAX</sub> (Wp)	257	261	265	269	272
Maximum Power Voltage-V <sub>MPP</sub> (V)	35.5	35.7	35.9	36.1	36.3
Maximum Power Current-IMPP (A)	7.24	7.31	7.37	7.45	7.51
Open Circuit Voltage-Voc (V)	43.5	43.7	44.0	44.2	44.4
Short Circuit Current-Isc (A)	7.69	7.76	7.83	7.91	7.99

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

#### MECHANICAL DATA

Solar Cells	Multicrystalline		
Cell Orientation	144 cells (6 × 24)		
Module Dimensions	2015 × 996 × 35 mm (79.33×39.21×1.38 inches)		
Weight	22.0 kg ( 48.5 lb)		
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Heat Strengthened Glass		
Encapsulant Material	EVA		
Backsheet	White		
Frame	35 mm (1.38inches) Anodized Aluminium Alloy		
J-Box	IP 68 rated		
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: N 140mm/P 285mm(5.51/11.22inches) Landscape: N 1400 mm /P 1400 mm (55.12/55.12 inches)		
Connector	MC4 /TS4*		

<sup>\*</sup>Please refer to regional datasheet for specified connector.

#### **TEMPERATURE RATINGS**

NMOT (Nominal Module Operating Temperature)	41°C (±3°C)		
Temperature Coefficient of PMAX	- 0.38%/℃		
Temperature Coefficient of Voc	- 0.31%/℃		
Temperature Coefficient of Isc	0.05%/°C		

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

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

#### WARRANTY

10 year Product Workmanship Warranty

25 year Power Warranty

(Please refer to product warranty for details)

#### PACKAGING CONFIGURATION

Modules per box: 30 pieces

ty Modules per 40' container: 660 pieces

