Multi

## SPLITMAX THE FRAMED 144-CELL MODULE (1500V)TSM-DE14H(II)

## **144 CELL**

**MONOCRYSTALLINE MODULE** 

350-380W

**POWER OUTPUT RANGE** 

**19.2% MAXIMUM EFFICIENCY** 

# 0/+5W

**POSITIVE POWER TOLERANCE** 

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina Solar is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina Solar as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners

### **Comprehensive Product And System Certificates**

IEC61215/IEC61730/UL1703/IEC61701/IEC62716 Quality Management System ISO 14001: Environmental Management System Greenhouse Gas Emissions Verification IS014064 OHSAS 18001: Occupational Health and Safety



















## Ideal for large scale installations

- Reduce BOS cost by connecting more modules in a string
- 1500 V IEC certied



## Half-cell design brings higher efficiency

- Reduced shading losses cases by inter row shading with the new cell string layout
- LRF integrated to gain more power, need avoid light sensitive case
- Low thermal coefficients for greater energy production at high operating temperatures
- Reduced interconnection losses



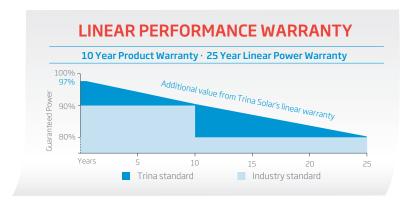
#### Highly reliable due to stringent quality control

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



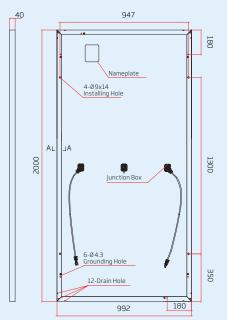
### Certified to withstand challenging environmental conditions

- 2400 Pa wind load
- 5400 Pa snow load

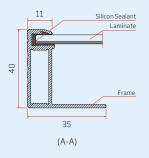




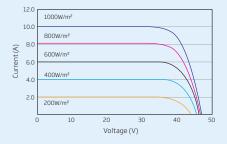
#### **DIMENSIONS OF PV MODULE** TSM-DE14H(II) (unit: mm)



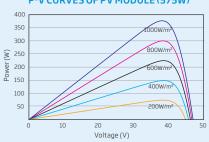
Back View



#### I-V CURVES OF PV MODULE (375W)



#### P-V CURVES OF PV MODULE (375W)



ELECTRICAL DATA @ STC	TSM- 350	TSM- 355	TSM- 360	TSM- 365	TSM- 370	TSM- 375	TSM- 380
Peak Power Watts-PMAX (Wp)*	350	355	360	365	370	375	380
Power Output Tolerance-PMAX (W)	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Maximum Power Voltage-V <sub>MPP</sub> (V)	38.4	38.6	38.8	39.0	39.2	39.4	39.6
Maximum Power Current-IMPP (A)	9.13	9.21	9.28	9.37	9.44	9.52	9.60
Open Circuit Voltage-Voc (V)	46.5	46.9	47.2	47.4	47.6	47.8	48.0
Short Circuit Current-Isc (A)	9.60	9.68	9.73	9.83	9.88	9.93	9.99
Module Efficiency ηπ (%)	17.6	17.9	18.1	18.4	18.6	18.9	19.2

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

ELECTRICAL DATA @ NOCT	TSM- 350	TSM- 355	TSM- 360	TSM- 365	TSM- 370	TSM- 375	TSM- 380
Maximum Power-P <sub>MAX</sub> (Wp)	260	263	267	271	274	278	282
Maximum Power Voltage-UMPP (V)	35.6	35.8	36.1	36.2	36.5	36.7	37.0
Maximum Power Current-Impp (A)	7.29	7.35	7.39	7.47	7.52	7.57	7.62
Open Circuit Voltage-Uoc (V)	43.2	43.5	43.8	44.0	44.2	44.3	44.5
Short Circuit Current-Isc (A)	7.75	7.82	7.86	7.94	7.98	8.02	8.07

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

#### **MECHANICAL DATA**

Solar Cells	Monocrystalline 156.75 × 78.375 mm
55.5.55.55	
Cell Orientation	144 cells (6 x 24)
Module Dimensions	2000 × 992 × 40 mm
Weight	23 kg
Glass	3.2 mm for Std Mono, high transparency, AR coated and heat tempered solar glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm², Portrait: N 140mm/P 285mm, Landscape: N 1400 mm/P 1400 mm
Connector	MC4 EV02/UTX/TS4

#### **TEMPERATURE RATINGS**

Nominal Operating Cell Temperature (NOCT)	44°C (±2K)		
Temperature Coefficient of PMAX	- 0.39%/K		
Temperature Coefficient of Voc	- 0.29%/K		
Temperature Coefficient of Isc	0.05%/K		

#### WARRANTY

10 year Product Workmanship Warranty 25 year Linear Performance Warranty (Please refer to product warranty for details)

#### PACKAGING CONFIGURATION

Modules per box: 27 pieces Modules per 40' container: 594 pieces

#### **MAXIMUM RATINGS**

Operational Temperature	-40 to +85°C		
Maximum System Voltage	1500 V DC (IEC)		
Max Series Fuse Rating*	15A		
Mechanical Load	5400 Pa		
Wind Load	2400 Pa		

 $<sup>\,^*\,\</sup>text{DO}\,\text{NOT}\,\text{connect}$  fuse in combiner box with two or more strings in parallel connection

