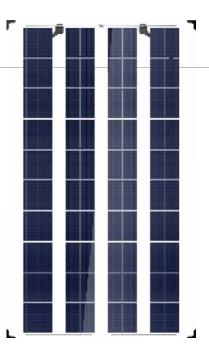
# THE DUOMAX MODULE



## 40 CELL MULTICRYSTALLINE MODULE

165-175W POWER OUTPUT RANGE

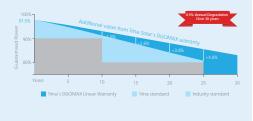
**10.6%** MAXIMUM EFFICIENCY

0~+5W POSITIVE POWER TOLERANCE

As a leading global manufacturer of next generation photovoltaic products, we believe close cooperation with our partners is critical to success. With local presence around the globe, Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners as the backbone of our shared success in driving Smart Energy Together.

#### Trina Solar Limited www.trinasolar.com

Trina Solar's DUOMAX Linear Performance War





### Highly reliable due to stringent quality control

- PID resistant and free of snail trails
- Reduced soiling
  Increased module robustness to minimize micro-cracks
- 100% EL double inspection



### **Enhanced safety**

- Fire class A certified by TUV Rheinland according to fire test IEC 61730-2 / MST 23
- Certified for fire type13 (UL 1703)

### **Increased value**

- Higher maximum system voltage reduces BOS costs
- 30 year linear warranty
- 0.5% annual degradation
- Transparent encapsulant enables higher light transmission for carport and greenhouse applications



# Certified to withstand the most challenging environmental conditions

- Module coating resistant to sand, acid, and alkali
- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

### Comprehensive products and system certificates

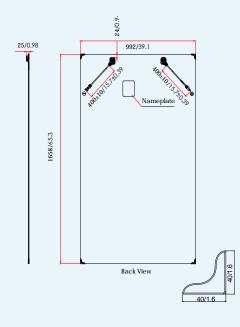
- IEC 61215/ IEC 61730/ UL 1703/ IEC 61701/IEC 62716
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO 14064: Greenhouse Gases Emissions Verification
- OHSAS 18001: Occupation Health and Safety Management System



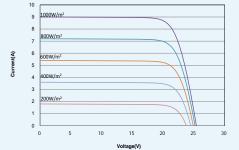
# THE **DUOMAX** MODULE

### **TSM-PEG40.07**

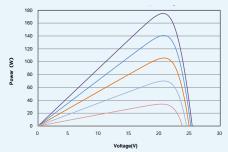
DIMENSIONS OF PV MODULE unit:mm/inch



#### I-V CURVES OF PV MODULE(175W)



P-V CURVES OF PV MODULE(175W)



**ELECTRICAL DATA (STC)** 170 175 Peak Power Watts-PMAX (Wp)\* 165 Power Output Tolerance-PMAX (W) 0~+5 Maximum Power Voltage-V<sub>MPP</sub> (V) 20.2 20.6 20.4 8.17 8.33 8.50 Maximum Power Current-IMPP (A) Open Circuit Voltage-Voc (V) 25.1 25.3 25.4 Short Circuit Current-Isc (A) 9.00 8.72 8.86 Module Efficiency ηm (%) 10.0 10.3 10.6 STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5. \*Test tolerance: ±3%. **ELECTRICAL DATA (NOCT)** 

Maximum Power-P <sub>MAX</sub> (Wp)	123	126	130
Maximum Power Voltage- $V_{MPP}$ (V)	18.6	18.8	19.0
Maximum Power Current-IMPP (A)	6.59	6.70	6.83
Open Circuit Voltage-Voc (V)	23.3	23.5	23.6
Short Circuit Current-Isc (A)	7.04	7.15	7.27

NOCT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

MECHANICAL DATA	
Solar Cells	Multicrystalline 156 × 156 mm (6 inches)
Cell Orientation	40 cells (4 × 10)
Module Dimensions	1658 × 992 × 6 mm (65.3 x 39.1 x 0.236 inches) 1664 x 998 x 7.6 mm with corner (65.5 x 39.3 x 0.299 inches) 1664 x 998 x 25 mm with corner and junction box (65.5 x 39.3 x 0.984 inches)
Weight	22.5 kg (49.6 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
EVA	Clear
Back Glass	2.5 mm (0.10 inches), Heat Strengthened Glass
Frame	Frameless
J-Box	IP 67 rated or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm² (0.006 inches²) Portrait: 400/400 mm (15.7/15.7 inches)
Connector	MC4 Compatible or Amphenol H4/UTX (1500V)
Fire Type	Type 13

### TEMPERATURE RATINGS

Nominal Operating Cell Temperature (NOCT)	44°C (±2°C)
Temperature Coefficient of PMAX	- 0.41%/°C
Temperature Coefficient of $V_{\rm OC}$	- 0.32%/°C
Temperature Coefficient of Isc	0.05%/°C

MAXIMUM RATINGS	
Operational Temperature	-40~+85°C
Maximum System	1500V DC (IEC)

Voltage	1000VDC (UL)
Max Series Fuse Rating	15A

TSM\_EN\_2016\_B

WARRANTY
10 year Product Workmanship Warranty
30 year Linear Power Warranty
(Please refer to product warranty for details)
PACKAGING CONFIGURATION
PACKAGING CONFIGURATION Modules per box: 30 pieces



CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT. © 2016 Trina Solar Limited. All rights reserved. Specifications included in this datasheet are subject to change without notice.