# THE DUOMAX

**DUAL GLASS 72-CELL MODULE** 

# 72 CELL

**MULTICRYSTALLINE MODULE** 

320-335W

**POWER OUTPUT RANGE** 

17.1% **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 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,

## **Comprehensive Products And System Certificates**

IEC61215/IEC61730/UL1703/IEC61701/IEC62716 ISO 9001: Quality Management System ISO 14001: Environmental Management System

ISO14064: Greenhouse gases Emissions Verification OHSAS 18001: Occupation Health and Safety Management System























# Highly reliable due to stringent quality control

- PID resistant and free of snail trails
- 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
- Low thermal coefficents for more energy production at higher temperatures

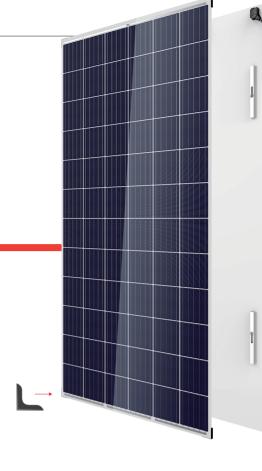


# Certified to withstand the most challenging environmental conditions

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

# Trina Solar's DUOMAX Linear Performance Warranty







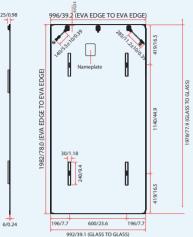
PRODUCTS
TSM-PEG14
TSM-PEG14.40

INSTALLATION METHODS Clamp

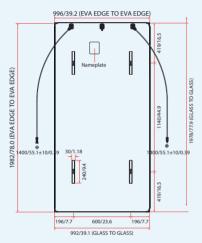
RANGE 320-335W 320-335W

# DIMENSIONS OF PV MODULE (mm/inch)

Gecko Grip

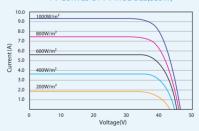


Back View (Portrait)

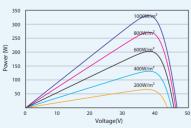


Back View (Landscape)

#### I-V CURVES OF PV MODULE(335W)



## P-V CURVES OF PV MODULE(335W)



#### ELECTRICAL DATA (STC)

Peak Power Watts-P <sub>MAX</sub> (Wp)*	320	325	330	335
Power Output Tolerance-P <sub>MAX</sub> (W)	0~+5			
Maximum Power Voltage-V <sub>MPP</sub> (V)	37.2	37.4	37.6	37.8
Maximum Power Current-Impp (A)	8.60	8.69	8.78	8.87
Open Circuit Voltage-Voc (V)	45.9	46.1	46.2	46.4
Short Circuit Current-Isc (A)	9.07	9.14	9.23	9.30
Module Efficiency	16.3	16.6	16.8	17.1

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

#### ELECTRICAL DATA (NOCT)

Maximum Power-P <sub>MAX</sub> (Wp)	238	241	244	250
Maximum Power Voltage-V <sub>MPP</sub> (V)	34.4	34.7	34.8	35.2
Maximum Power Current-I <sub>MPP</sub> (A)	6.92	6.94	7.02	7.11
Open Circuit Voltage-Voc (V)	42.6	42.6	42.7	43.2
Short Circuit Current-Isc (A)	7.32	7.38	7.45	7.51

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

#### MECHANICAL DATA

Solar Cells	Multicrystalline 156.75 × 156.75 mm (6 inches)	
Cell Orientation	72 cells (6 × 12)	
	1978 × 992 × 6 mm (77.9 × 39.1 × 0.236 inches)	
Module Dimensions	$1982 \times 996 \times 6$ mm with edge banding $(78.0 \times 39.2 \times 0.236$ inches)	
	$1984 \times 998 \times 7.6$ mm with corner protector (78.1 $\times$ 39.3 $\times$ 0.299 inches) (Default)*	
Weight	28.0 kg (61.7 lb)	
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass	
EVA	White	
Back Glass	2.5 mm (0.10 inches), Heat Strengthened Glass	
Frame	Frameless	
J-Box	IP 67 or IP 68 rated	
	Photovoltaic Technology Cable 4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> )	
Cables	Portrait: 140/285 mm (5.5/11.2 inches)	
	Landscape: 1400/1400 mm (55.1/55.1 inches)	
Connector	MC4 or Amphenol H4/UTX (1500V)	
Fire Type	Type 13	

# TEMPERATURE RATINGS

NOCT (Nominal Operating Cell Temperature)	44°C (±2°C)
Temperature Coefficient of PMAX	- 0.41%/°C
Temperature Coefficient of Voc	- 0.32%/°C
Temperature Coefficient of Isc	0.05%/°C

#### MAXIMUM RATINGS

Operational Temperature	-40~+85°C	
Maximum SystemVoltage	1500V DC (IEC)	
	1000V DC (UL)	
Max Series Fuse Rating	15A	

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

#### WARRANTY

10 year Product Workmanship Warranty
30 year Linear Power Warranty

(Please refer to product warranty for details)

#### PACKAGING CONFIGURATION

Modules per box: 30 pieces

Modules per 40' container: 660 pieces

# MORE OPTIONS

More Options Available 

Compact AR Coating

POE (Polyolefin Elastomer) Adhesive



<sup>\*</sup>Not applicable to slide-in racking solution