

60 CELL

MONOCRYSTALLINE MODULE

270-295W

**POWER OUTPUT RANGE** 

18.0%

**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

# LINEAR PERFORMANCE WARRANTY 10 Year Product Warranty - 25 Year Linear Power Warranty Additional value from Trina Solar's finear warranty Trinas linear Warranty Standard Step Warranty Standard Step Warranty





#### Maximize limited space with top-end efficiency

- Up to 180 W/m² power density
- Low thermal coefficients for greater energy production at high operating temperatures



#### 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
- 100% EL double inspection



# Certified to withstand challenging environmental conditions

- 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

















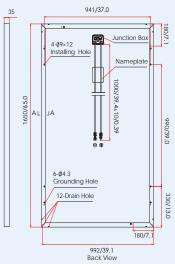


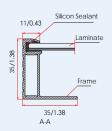
#### **PRODUCTS**

#### **POWER RANGE**

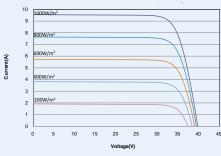
TSM-DD05A.08(II) 275-295W TSM-DD05A.05(II) 270-290W

## DIMENSIONS OF PV MODULE unit:mm/inches

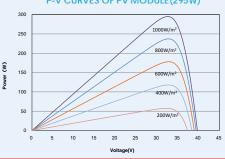




#### I-V CURVES OF PV MODULE(295W)



#### P-V CURVES OF PV MODULE (295W)



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

Peak Power Watts-P <sub>MAX</sub> (Wp)*	270	275	280	285	290	295
Power Output Tolerance-PMAX (W)			0~	+5		
Maximum Power Voltage-V <sub>MPP</sub> (V)	31.2	31.4	31.7	31.8	32.2	32.5
Maximum Power Current-Impp (A)	8.66	8.76	8.84	8.97	9.01	9.08
Open Circuit Voltage-Voc (V)	38.4	38.7	39.0	39.3	39.5	39.7
Short Circuit Current-Isc (A)	9.18	9.26	9.35	9.45	9.50	9.55
Module Efficiency ηm (%)	16.5	16.8	17.1	17.4	17.7	18.0

STC: Irradiance 1000 W/m², Cell Temperature 25°C, Air Mass AM1.5.

#### **ELECTRICAL DATA (NOCT)**

Maximum Power-P <sub>MAX</sub> (Wp)	201	205	209	212	216	220
Maximum Power Voltage-V <sub>MPP</sub> (V)	28.9	29.2	29.4	29.6	29.9	30.2
Maximum Power Current-Impp (A)	6.96	7.02	7.10	7.17	7.23	7.28
Open Circuit Voltage-Voc (V)	35.7	36.0	36.3	36.6	36.7	36.9
Short Circuit Current-Isc (A)	7.41	7.48	7.55	7.63	7.67	7.71

NOCT: Irradiance at 800 W/m $^2$ , Ambient Temperature 20 $^{\circ}$ C, Wind Speed 1 m/s.

#### MECHANICAL DATA

Solar Cells	Monocrystalline 156 × 156 mm (6 inches)
Cell Orientation	60 cells (6 × 10)
Module Dimensions	1650 × 992 × 35 mm (65.0 x 39.1 x 1.38 inches)
Weight	18.6 kg (41.0 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass
Backsheet	White (DD05A.08(II)); Black (DD05A.05(II))
Frame	Black (DD05A.08(II), DD05A.05(II))
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), 1000 mm (39.4 inches)
Connector	MC4 Compatible or Amphenol H4/UTX
Fire Type	Type 1 or Type 2

#### **TEMPERATURE RATINGS**

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

#### WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

#### PACKAGING CONFIGURATION

Modules per box: 30 pieces

Modules per 40' container: 840 pieces

#### **MAXIMUM RATINGS**

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



TSM\_EN\_2016\_D



<sup>\*</sup>Test tolerance: ±3%.