# THE

# DUOMAXtwin

# **BIFACIAL DUAL GLASS 60-CELL MODULE**

# **60 CELL**

**MONOCRYSTALLINE MODULE** 

# 285-300W

**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.

## 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



















# High power output

- •Increase total power output through generation from front and back side
- Backside power gain up to 25% depending on albedo
- Unique J-box design and installation method to avoid shading on the back side



### **Low LCOE**

- Maximize limited size, savings in BOS and labour cost
- Compatible with major tracker systems



## **Wide application**

- Deployable for ground mounted utility, greenhouse and agricultural projects
- Special application like sound barriers on expressways



## **Environmental conditions**

• Resistant to sand, acid, alkaline

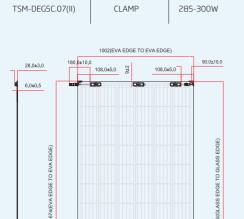
### Trina Solar's DUOMAX-Twin Linear Performance Warranty





POWER RANGE

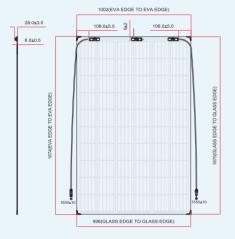
# BIFACIAL DUAL GLASS 60-CELL MODULE



INSTALLATION METHODS

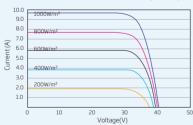
**PRODUCTS** 

998(GLASS EDGE TO GLASS EDGE) Back View (Portrait)

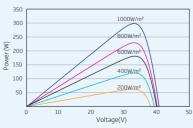


Back View (Landscape)

### I-V CURVES OF PV MODULE(300W)



# P-V CURVES OF PV MODULE(300W)



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

Peak Power Watts-PMAX (Wp)*	285	290	295	300
Power Output Tolerance-PMAX (W)		0~+5		
Maximum Power Voltage-V <sub>MPP</sub> (V)	32.5	32.7	32.9	33.1
Maximum Power Current-Impp (A)	8.77	8.87	8.97	9.07
Open Circuit Voltage-Voc (V)	39.5	39.7	39.9	40.1
Short Circuit Current-Isc (A)	9.38	9.48	9.58	9.68
Module Efficiency № (%)	17.2	17.4	17.7	18.0

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

### BI-FACIAL OUTPUT - Backside Power Gain

10%	Power Output(W)	314	319	325	330
	Module Efficiency(%)	18.9	19.1	19.5	19.8
150	Power Output(W)	328	334	339	345
15%	Module Efficiency(%)	19.8	20.0	20.4	20.7
350	Power Output(W)	356	363	369	375
25%	Module Efficiency(%)	21.5	21.8	22.1	22.5

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

Maximum Power-P <sub>MAX</sub> (Wp)	211	215	219	223
Maximum Power Voltage-V <sub>MPP</sub> (V)	30.1	30.3	30.5	30.7
Maximum Power Current-I <sub>MPP</sub> (A)	7.01	7.09	7.17	7.25
Open Circuit Voltage-Voc (V)	37.3	37.5	37.7	37.9
Short Circuit Current-I <sub>SC</sub> (A)	7.58	7.66	7.74	7.82

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

### **MECHANICAL DATA**

Solar Cells	Monocrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	60 cells (6 × 10)
Module Dimensions	$1670 \times 998 \times 6 \text{ mm}$ , $1674 \times 1002 \times 6 \text{ mm}$ with edge banding
	$1676 \times 1004 \times 7.6$ mm with corner protector
Weight	23.5 kg (51.8 lb)
Front Glass	2.5 mm (0.10 inches), High Transmission, AR Coated Heat Strengthened Glass
EVA	Transparent
Back Glass	2.5 mm (0.10 inches), High Transmission, low iron , Heat Strengthened Glass
Frame	Frameless
J-Box	IP 67, Photovoltaic Technology Cable 4.0 mm² (0.006 inches²)
Cables	Portrait: 90/180 mm, Landscape: 1550/1550 mm
Connector	MC4 Compatible

#### **TEMPERATURE RATINGS**

NOCT (Nominal Operating Cell Temperature)	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

#### **MAXIMUM RATINGS**

Operational Temperature	-40~+85°C
Maximum SystemVoltage	1500V DC (IEC)
	1000V DC (UL)
Max Series Fuse Rating	20A

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

#### 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

