



TRINA TSM-DC01, 165W to 180W

Solar Photovoltaic Module

TYPICAL ELECTRICAL CHARACTERISTICS

Type	TSM	165-DC01	170-DC01	175-DC01	180-DC01
Max-Power	Pm(W)	165	170	175	180
Power Tolerance	(%)	±3	±3	±3	±3
Max-Power Voltage	Vm(V)	35.6	35.8	36.2	36.8
Max-Power Current	Im(A)	4.65	4.76	4.85	4.90
Open-Circuit Voltage	Voc(V)	43.2	43.6	43.9	44.2
Short-Circuit Current	Isc(A)	5.20	5.25	5.30	5.35
Max-System Voltage	(VDC)	1000			
Cell Efficiency	ηc (%)	15.4	15.9	16.4	16.8
Module Efficiency	ηm (%)	12.9	13.3	13.7	14.1
Number, type and arrangement of cells		72 pcs. Mono-Crystalline Silicon (6x12)			
Cell Size	(mm)	125 X 125			
No. of Bypass Diodes	(pcs.)	3			
Max. Series Fuse	(A)	7			
Pm Temperature Coefficient	(%/°C)	- 0.45			
Isc Temperature Coefficient	(%/°C)	0.05			
Voc Temperature Coefficient	(%/°C)	- 0.35			
NOCT- Nominal Operating Cell Temperature	(°C)	47±2			

STRENGTHS

- Tolerance ± 3%
- High Efficiency Cells
- Plug & Play Connectors
- High Transmission, Low Iron Tempered Glass

WARRANTY

Manufacturing:	5 years
Power production:	90% : 10 years 80% : 25 years

CERTIFICATIONS



MECHANICAL CHARACTERISTICS

Cable type, Diameter and Length		4mm ² , TÜV certified, 900mm
Type of Connector		Compatible Type III and Type IV
Dimension A*B*C	(mm)	1581*809*40
Weight	(Kg)	15.6
No. of Draining Holes In Frame		12
Glass, Type and Thickness		High Transmis., Low Iron, Tempered Glass 3.2mm.

PACKAGING CONFIGURATION

Packing Configuration		2 pcs./box or 23 pcs./box
Quantity/Pallet		38 pcs/pallet or 23 pcs/pallet
Loading Capacity		532 pcs/40ft or 644pcs/40ft(H)

ABSOLUTE RATINGS

Dielectric Insulation Voltage	(VDC)	3000 max.
Operating Temperature	(°C)	-40~+85
Storage Temperature	(°C)	-40~+85

*STC Conditions(1000W/m²; 1.5 AM and 25°C Cell temperature)

Suitable for On Grid and Off Grid Systems

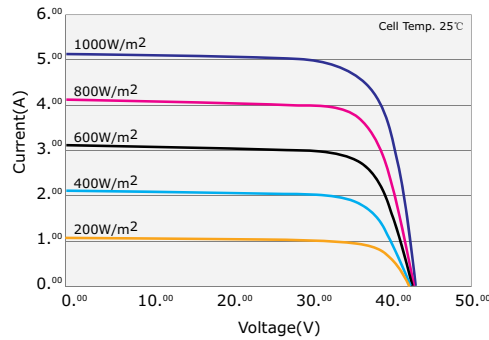




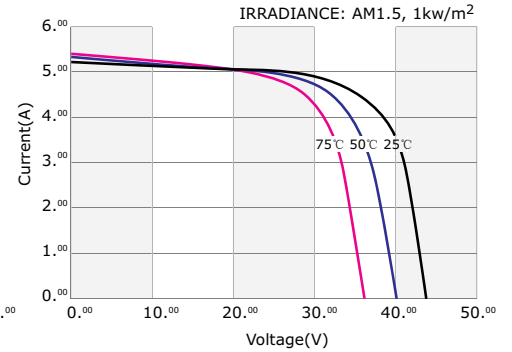
TRINA TSM-DC01, 165W to 180W Solar Photovoltaic Module

I-V Curves

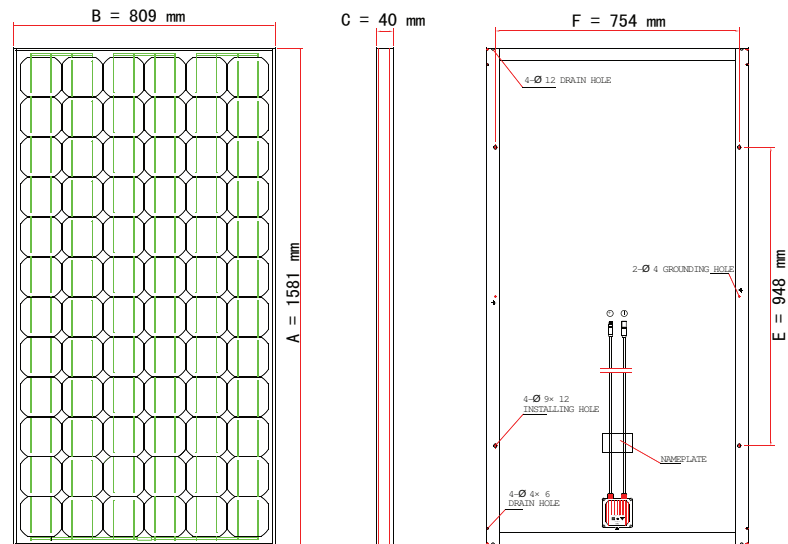
I-V Curves of PV module TSM-175-DC01



I-V Curves of PV module TSM-175-DC01 at various cell temperatures



Dimensions



Dimensions (mm)	A*B*C	1581*809*40
Installation Hole (mm)	E*F	948*754
Cable Length (mm)	G	900

*The company is not responsible for potential typing errors.