

TRINA TSM-DC05, 220W to 235W

TYPICAL ELECTRICAL CHARACTERISTICS

Type	TSM-DC05	220	225	230	235
Max-Power	Pm(W)	220	225	230	235
Power Tolerance	(%)	±3	±3	±3	±3
Max-Power Voltage	Vm(V)	29.0	29.4	29.8	30.1
Max-Power Current	Im(A)	7.60	7.66	7.72	7.81
Open-Circuit Voltage	Voc(V)	36.8	36.9	37.0	37.1
Short-Circuit Current	Isc(A)	8.15	8.20	8.26	8.34
Max-System Voltage	(VDC)	1000			
Cell Efficiency	η_c (%)	15.5	15.9	16.2	16.6
Module Efficiency	η_m (%)	13.4	13.7	14.1	14.4
Number, type and arrangement of cells		60 pcs. Mono-Crystalline Silicon (6x10)			
Cell Size		156mm x 156 mm			
No. of Bypass Diodes	(pcs.)	6			
Max. Series Fuse	(A)	14			
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			



High Efficiency
Monocrystalline Solar Modules

STRENGTHS

- Tolerance ± 3%
- 3 Bus Bar Configuration
- Plug & Play Connectors
- High Transmission, Low Iron Tempered Glass
- Can bear loads up to 5400 Pascals (IEC 61215 2nd)

WARRANTY

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

CERTIFICATIONS



MECHANICAL CHARACTERISTICS

Cable Type, Diameter and Length		Ø= 4mm ² L= 1000mm TÜV certified
Type of Connector		MC3 or MC4, Compatible Type III or IV
Dimension A*B*C		1650*992*46 (mm)
Weight		19.5 Kg
No. of Draining Holes In Frame		8
Glass, Type and Thickness		High Transmission, Low Iron, Tempered Glass 3.2 mm

PACKAGING CONFIGURATION

Packing Configuration		20 pcs./ box
Quantity/Pallet		1 box / pallet
Loading Capacity		520 pcs/40ft or 120 pcs/20ft

ABSOLUTE RATINGS

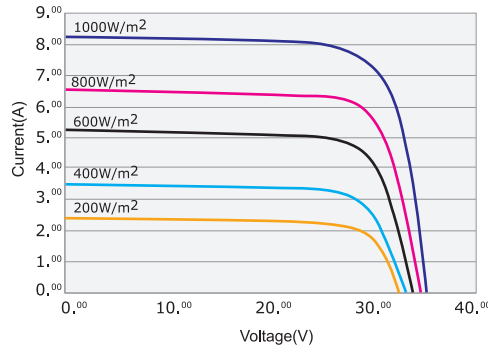
Dielectric Insulation Voltage	(VDC)	3000 max.
Operating Temperature	(°C)	-40~+85
Storage Temperature	(°C)	-40~+85

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

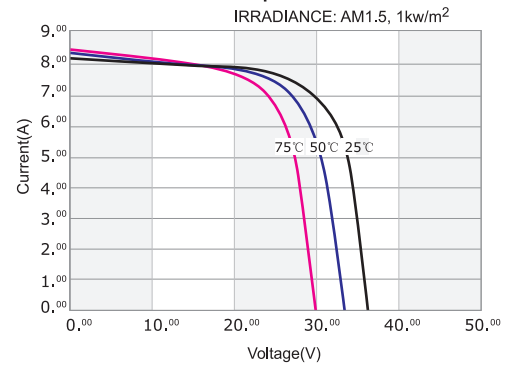
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I-V CURVES

I-V Curves of PV module TSM-230DC05

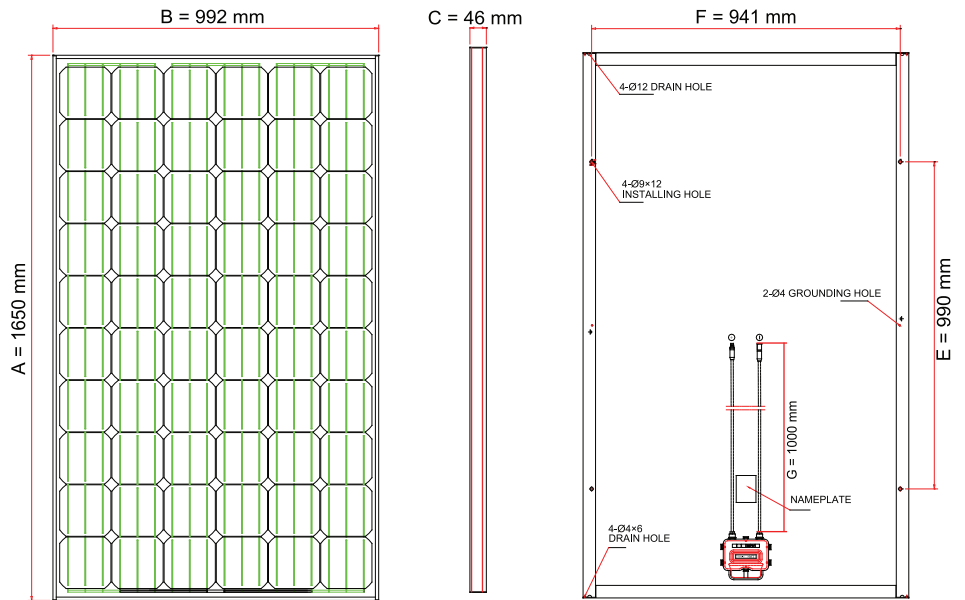


I-V Curves of PV module TSM-230DC05 at various cell temperatures



High Efficiency Monocrystalline Solar Modules

DIMENSIONS



Dimensions A*B*C	1650*992*46 (mm)
Installation Hole E*F	990*941 (mm)
Cable Length G	1000 mm

*The company is not responsible for potential typing errors.