



Changzhou Trina Solar Energy Co., Ltd.

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|---|------------------------|---------------------------|
| Product Specification (60pcs Multi-cells, ReHen J-box, 1000V system Voltage) | Product Name | Photovoltaic Solar Module |
| | Document Name | Spec. of TSM-***PC05 |
| | Document number | PS-M-0003 |
| | Version Number | A |

Typical Electrical Characteristics

| Typical Type | Unit | TSM-200PC05 | TSM-210PC05 | TSM-220PC05 | TSM-230PC05 |
|--|--------|--|-------------|-------------|-------------|
| Max-Power and tolerance | Pm(W) | 200 | 210 | 220 | 230 |
| Power tolerance | % | ±3 | ±3 | ±3 | ±3 |
| Max-Power Voltage | Vm(V) | 28.70 | 29.20 | 29.8 | 30 |
| Max-Power Current | Im(A) | 6.97 | 7.19 | 7.39 | 7.66 |
| Open-Circuit Voltage | Voc(V) | 36.00 | 36.40 | 36.8 | 37 |
| Short-Circuit Current | Isc(A) | 7.75 | 7.86 | 8 | 8.18 |
| Max-System Voltage | VDC | 1000 | | | |
| Cell Efficiency | ηc(%) | 13.7 | 14.4 | 15.1 | 15.7 |
| Module Efficiency | ηm(%) | 12.2 | 12.8 | 13.4 | 14.1 |
| Cell and Connections | | Poly-crystalline silicon, 60pcs in series (6*10) | | | |
| Cell Size | mm | 156*156 | | | |
| Cable type, diameter and length | | 4mm ² (12AWG), 4mm ² , TÜV Certified, length: 1000mm | | | |
| Type of connector | | Type III or IV | | | |
| Nº. of bypass diodes | | 6 pcs. | | | |
| Max. Series Fuse | A | 11 | | | |
| Pm Temperature Coefficient | %/°C | - 0.45 | | | |
| Voc Temperature Coefficient | %/°C | - 0.35 | | | |
| Isc Temperature Coefficient | %/°C | 0.05 | | | |
| NOCT(Nominal Operating Cell Temperature) | °C | 47± 2 | | | |
| Test Condition | | STC:AM=1.5, 1000W/m ² , Cells Temperature 25°C | | | |
| Dielectric Insulation Voltage | VDC | 3000 max. | | | |
| Operating Temperature | °C | -40~+85 | | | |
| Storage Temperature | °C | -40~+40 | | | |

Mechanical Characteristics

| | | |
|---------------------------------|----|---------------------------|
| Dimension A*B*C | mm | 1650*992*46 |
| Installation Hole Dimension E*F | mm | 990*941 |
| Cable Length G | mm | 1000 |
| Weight | Kg | 19.5 |
| Packing Configuration | | 20 pcs per carton |
| Loading Capacity | | 520 pcs/40ft; 240pcs/20ft |

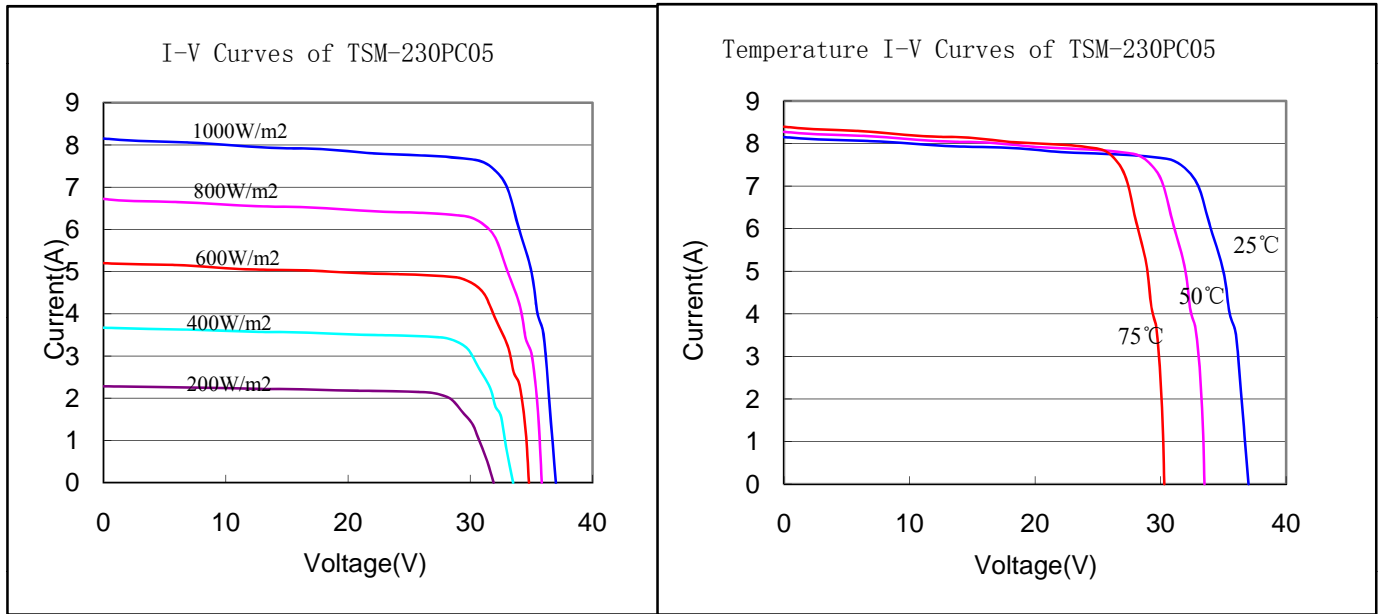
| Originator | | Check | | Approval | |
|------------|-------|------------|-------|------------|-------|
| Signature: | Date: | Signature: | Date: | Signature: | Date: |

Product Specification

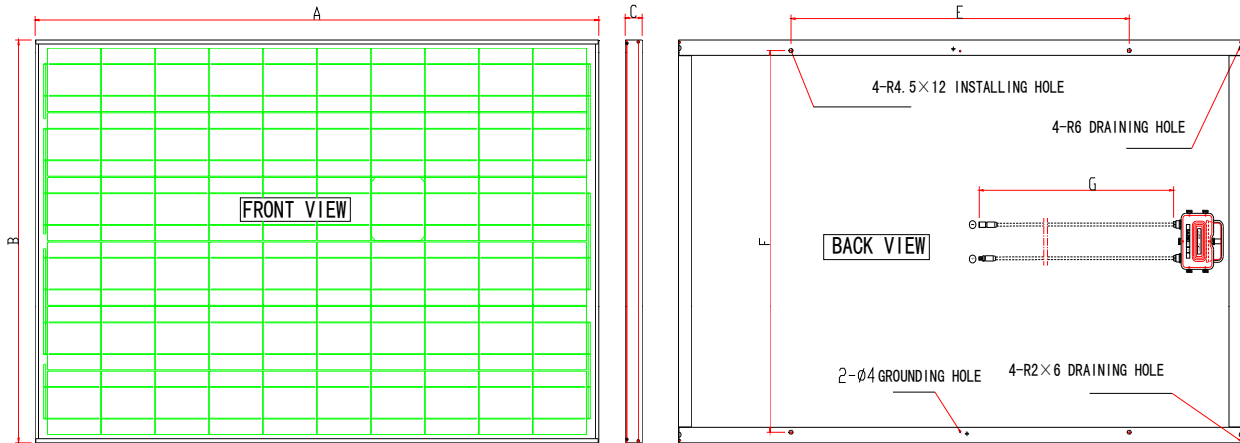
(60pcs Multi-cells, ReHen J-box,
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I-V Curve



Module Dimensions Drawing



| Originator | | Check | | Approval | |
|------------|-------|------------|-------|------------|-------|
| Signature: | Date: | Signature: | Date: | Signature: | Date: |