

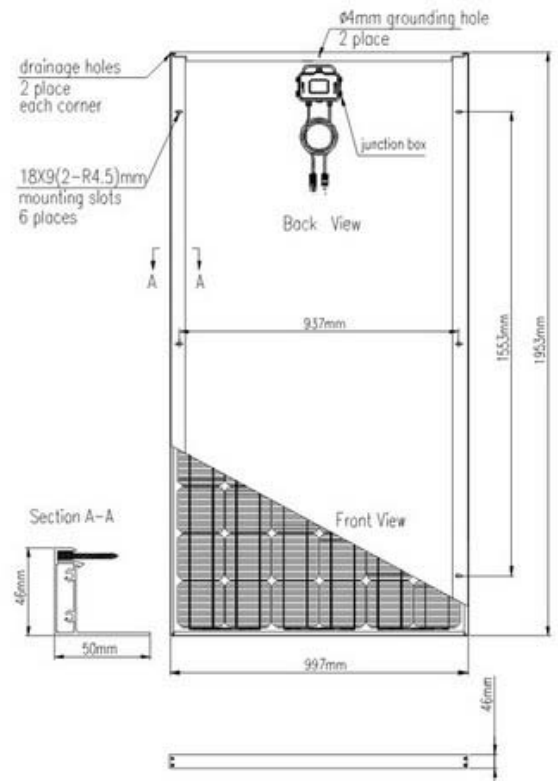
# Monocrystalline Solar Module 156X156mm 6x12 Cells



## Electrical Characteristics

| TUV-Model                       | UL-270D-72        | UL-275D-72 | UL-280D-72 | UL-285D-72 | UL-290D-72 | UL-295D-72 | UL-300D-72 |
|---------------------------------|-------------------|------------|------------|------------|------------|------------|------------|
| UL-Model                        | UL-270D           | UL-275D    | UL-280D    | UL-285D    | UL-290D    | UL-295D    | UL-300D    |
| Max Power Pm(W)                 | 270               | 275        | 280        | 285        | 290        | 295        | 300        |
| Max Power Voltage Vm(V)         | 36.2              | 36.3       | 36.3       | 36.4       | 36.5       | 36.6       | 36.7       |
| Max Power Current Im(A)         | 7.46              | 7.58       | 7.72       | 7.83       | 7.95       | 8.06       | 8.18       |
| Open-Circuit Voltage Voc(V)     | 44.4              | 44.5       | 44.5       | 44.6       | 44.7       | 44.8       | 44.9       |
| Short-Circuit Current Isc(A)    | 8.16              | 8.28       | 8.35       | 8.40       | 8.44       | 8.50       | 8.63       |
| Cell Efficiency                 | 15.7%             | 16.0%      | 16.3%      | 16.6%      | 16.9%      | 17.1%      | 17.4%      |
| Module Efficiency               | 13.9%             | 14.1%      | 14.4%      | 14.6%      | 14.9%      | 15.2%      | 15.4%      |
| Power Tolerance                 | ±3%               |            |            |            |            |            |            |
| Maximum System Voltage(V)       | 1000(TUV)/600(UL) |            |            |            |            |            |            |
| Temperature Coefficient of Isc  | 0.065%/°C         |            |            |            |            |            |            |
| Temperature Coefficient of Voc  | -0.35%/°C         |            |            |            |            |            |            |
| Temperature Coefficient of Pmax | -0.40%/°C         |            |            |            |            |            |            |
| Operating Temperature           | -40°C~+85°C       |            |            |            |            |            |            |
| NOCT                            | 47±2°C            |            |            |            |            |            |            |
| Series Fuse Rating(A)           | 15                |            |            |            |            |            |            |

STC: irradiance: 1000W/mm<sup>2</sup>; solar spectrum: AM1.5; cell temperature: 25°C



## Mechanical Characteristics

|                       |             |
|-----------------------|-------------|
| Module Dimension (mm) | 1953x997x46 |
| Cell Dimension (mm)   | 156x156     |
| Array (PCS)           | 6x12        |
| Weight(Kg)            | 23          |

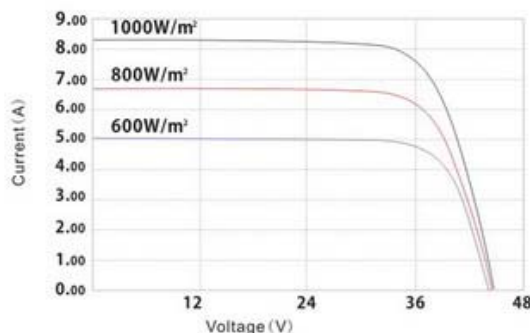
## GUARANTEE

- 5-year product guarantee
- 10-year performance guarantee at 90% power output
- 25 year performance guarantee at 80% power output

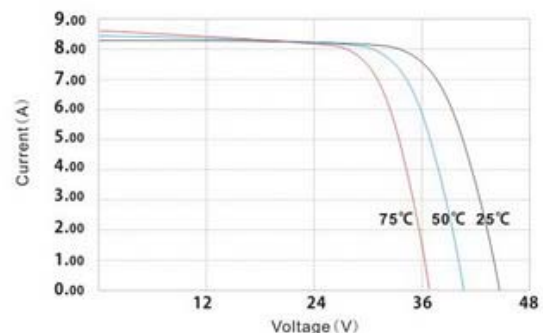
## NOTE

- Nominal Operating Cell Temperature above data is only for reference
- Deviation of Vm(V), Im(A), Voc(V) and Isc(A) of ±10%

## I-V Curves of UL-280D/UL-280D-72



I-V Curves at different irradiance



I-V Curves at different temperature