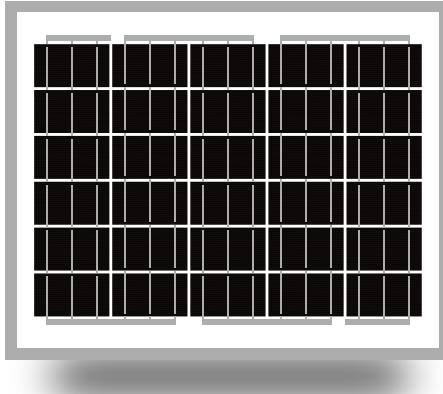


ST-10R-12

High Efficiency Monocrystalline PV Module

- Nominal 12V DC for standard output.
- Outstanding low-light performance.
- Heavy-duty anodized frames.
- High transparent low-iron, tempered glass.
- Designed to withstand high wind pressures, hail and heavy snow.
- Quality aesthetic appearance.



30 CELLS
MONOCRYSTALLINE MODULE

10W
POWER OUTPUT

21.1%
MODULE EFFICIENCY

3%
POSITIVE TOLERANCE



High Efficiency

Module Efficiency improved through advanced cell technology and manufacturing capabilities



High PID Resistance

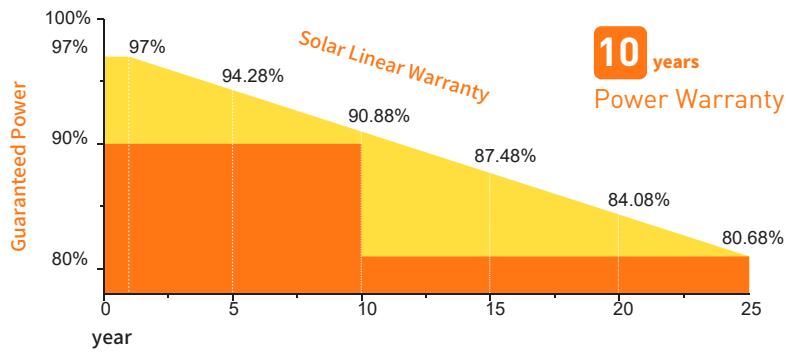
Advanced cell technology and qualified materials lead to high resistance to PID



Withstands Harsh Environment

High PID resistance, 5400 Pa positive load, 2400 Pa negative load, Salt mist (IEC 61701)

Performance Warranty



5 years
Product Warranty

Wind Load/Snow Load:
2400pa/5400pa

10 years
Power Warranty

Positive Power Tolerance:
0~±3%

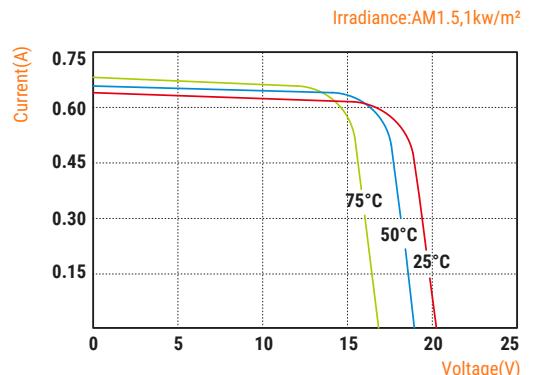
Warranty Information:
5 Years Product Workmanship

Electrical Characteristics

| | |
|---|------------------------------------|
| Maximum power (Pmax) | 10W |
| Voltage at Pmax (Vmp) | 17.2V |
| Current at Pmax (Imp) | 0.59A |
| Open-circuit voltage (Voc) | 20.3V |
| Short-circuit current (Isc) | 0.62A |
| Temperature coefficient of Voc | $-(80 \pm 10) \text{mV}/\text{°C}$ |
| Temperature coefficient of Isc | $(0.065 \pm 0.015) \text{%/ °C}$ |
| Temperature coefficient of power | $-(0.5 \pm 0.05) \text{%/ °C}$ |
| NOCT (Air 20°C; Sun 0.8kW/m ² wind 1m/s) | 47±2°C |
| Operating temperature | -40°C to 85°C |
| Maximum system voltage | 1000V DC |
| Power tolerance | ± 3% |

*STC: Irradiance 1000W/m², AM1.5 spectrum, module temperature 25°C

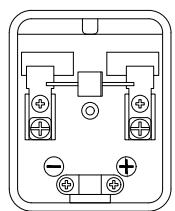
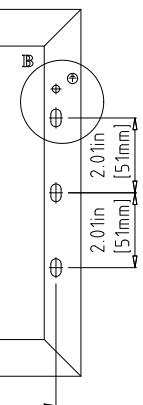
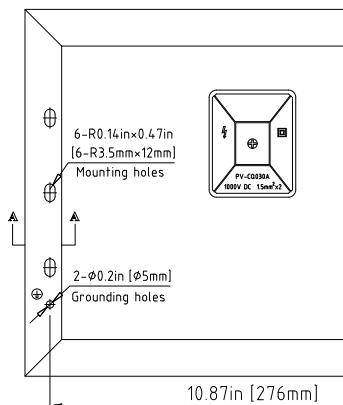
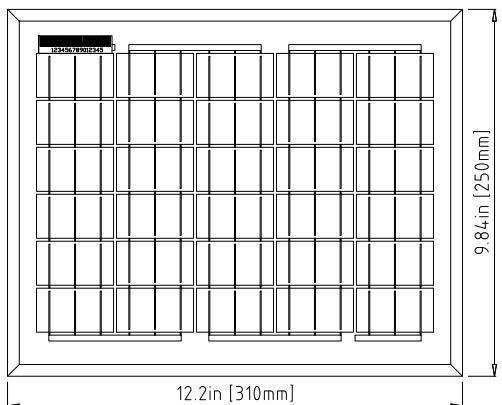
*NOCT:Nominal operating cell temperature (the data is only for reference)



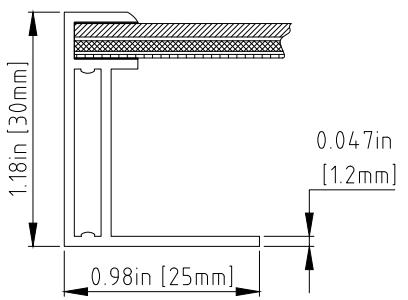
I-V Curves (STC)

Specifications

| | |
|------------------------------|---|
| Cells | Monocrystalline silicon solar cell |
| No. of cells and connections | 30(5X6) |
| Module dimension | 9.84in.x12.2in.x1.18in.[250mmx310mmx30mm] |
| Weight | 2.41lbs[1.09kg] |
| Packing information(Carton) | 15.75in.x13.39in.x11.02in.[400mmx340mmx280mm]/(10pcs/ctn) |



Junction Box
Top View (Lid Open)



Section A-A