



## Polycrystalline PV module 72 cells

### Electrical Characteristics

Model	UP-M250P	UP-M260P	UP-M270P	UP-M280P
Max Power Pm (W)	250	260	270	280
Max-Power Voltage Vm (V)	34.6	34.8	35.1	35.2
Max-Power Current Im (A)	7.23	7.47	7.70	7.95
Open-Circuit Voltage Voc (V)	43.7	44.2	44.6	44.8
Short-Circuit Current Isc (A)	7.98	8.10	8.22	8.35
Cell Efficiency	14.6%	15.1%	15.7%	16.3%
Module Efficiency	12.9%	13.4%	13.9%	14.4%
Maximum System Voltage (V)	1000(TUV)/600(UL)			
Power Tolerance	±3%			

### Components & Mechanical Data

Front Glass	High Transparency Tempered Glass, 4mm - <b>Saint Gobain</b> (Albarino) // <b>CSG</b>
Junction Box	<b>Huber+ Suhner</b> (IP 67) Radox HA3 // <b>Tyco</b> , 1740971-1
Bypass Diode	3 diodes - <b>ST</b> STPS145 // <b>Diotec</b> SL1515 (15A)
Output Cables	Cable <b>Tyco</b> 1m, ZHSCG (4mm <sup>2</sup> and 12AWG), IEC and UL approved
Connectors	<b>MC4</b> // <b>Tyco</b> , IP67, IEC and UL approved
Frame	Anodized aluminum alloy type 6063-T5
Encapsulation Material	EVA (0.50 + 0.03mm thickness)
Back Foil	White TPT (0.32+0.03mm thickness)
Silicone Sealant	<b>Dow Corning</b>
Temperature Range	-40°C to +90°C
Max Load	6400 Pa
Impact Resistance	Steel ball - 1040g dropped from 1m high



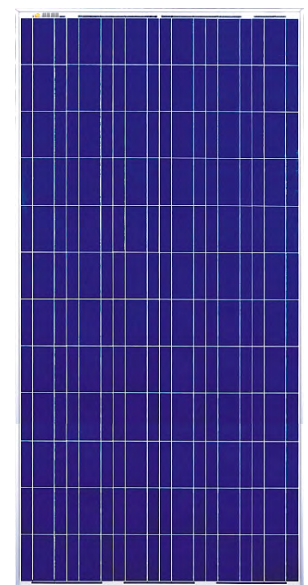
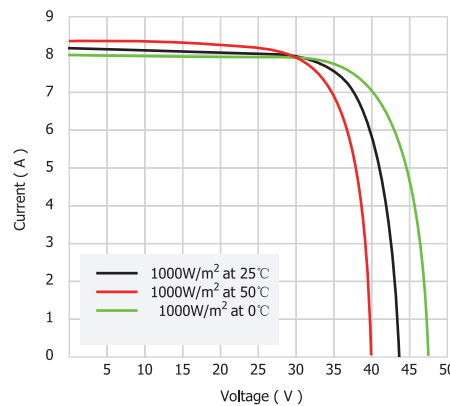
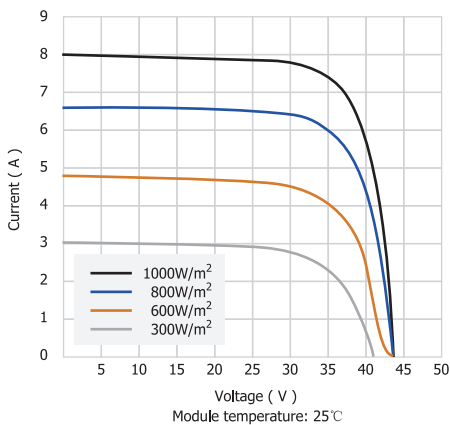
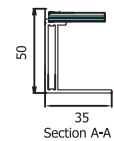
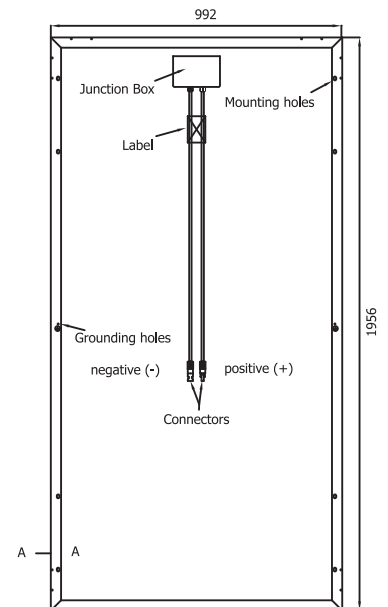


## Specifications

Cells	Polycrystalline silicon solar cells 156mm x 156mm
Cells Number	72 (6x12)
Dimension(mm)	1956 x 992 x 50
Weight(kg)	22.0

## Temperature Coefficients

NOCT (°C)	45±2
Current Temperature Coefficient of Isc(%/°C)	0.06±0.01
Voltage Temperature Coefficient of Voc(%/°C)	-0.34±0.01
Temperature Coefficient of Im(%/°C)	-0.02±0.01
Temperature Coefficient of Vm(%/°C)	-0.50±0.01
Temperature Coefficient of Pm(%/°C)	-0.40±0.05



### Guarantee:

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

### Note:

- STC: Irradiance 1000W/m<sup>2</sup>, Module temperature 25°C, AM=1.5
- Nominal Operating Cell Temperature above data is only for reference
- Deviation of Vm(V), Im(A), Voc(V) and Isc(A) of ±10%

