

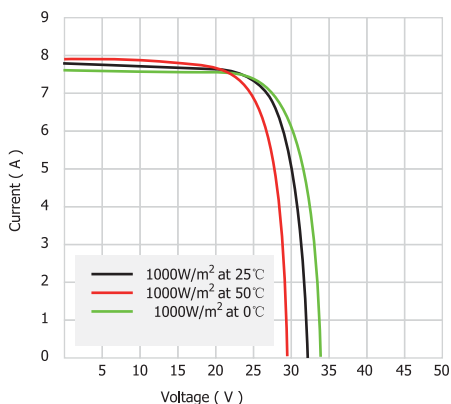
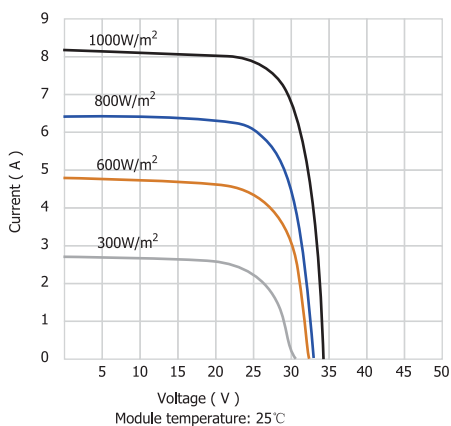


# Polycrystalline PV module 54 cells

## Electrical Characteristics

Model	UP-M180P	UP-M190P	UP-M200P	UP-M210P
Max Power Pm(W)	180	190	200	210
Max-Power Voltage Vm(V)	24.5	25.3	26.0	26.8
Max-Power Current Im(A)	7.35	7.51	7.70	7.84
Open-Circuit Voltage Voc(V)	32.6	32.8	33.1	33.3
Short-Circuit Current Isc(A)	7.80	8.10	8.25	8.40
Cell Efficiency	14.0%	14.8%	15.5%	16.3%
Maximum System Voltage(V)	1000(TUV)/600(UL)			
Power Tolerance	±3%			

## Temperature Coefficients



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



UPSOLAR Europe S.A.S  
 15, rue du Louvre, 75001  
 Paris, France  
 Tel: +33 1 83 62 02 00  
 Fax: +33 1 83 62 02 01

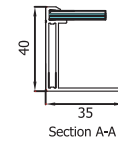
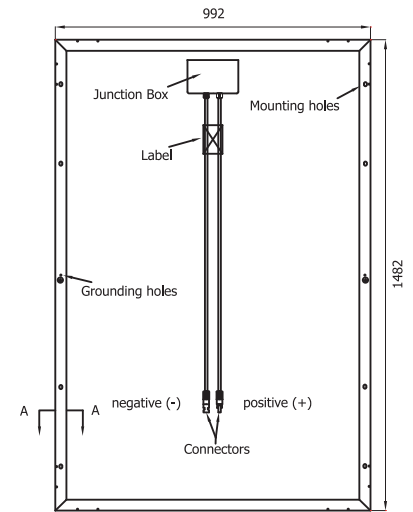
UPSOLAR Shanghai  
 19/F Silver Centre  
 1388 North Shanxi Rd, Shanghai, China  
 Tel: 0086-21-6277 5477  
 Fax: 0086-21-6277 5664





## Specifications

Cells	Polycrystalline silicon solar cells 156mm×156mm
Cells Number	54(6×9)
Dimension(mm)	1482×992×40
Weight(kg)	17.5



## Components & Mechanical Data

Front Glass	Saint-Gobain glass, 3.2mm tempered
Junction Box	Tyco, 1740971 with IP-65 rated
Diode	SL1515 (15A)
Output Cables	1m length Tyco cable: zhscg (4mm <sup>2</sup> and 12AWG), IEC and UL approved
Connectors	MC4 or Tyco with IP67, IEC and UL approved
Frame	Anodized aluminum alloy type 6063-T5
Encapsulation Material	EVA(0.50±0.05mm thickness)
Back Foil	White TPT(0.32±0.03mm thickness)
Temperature Range	-40°C to +90°C
Max Load	5400 Pa
Impact Resistance	Steel ball - 1040g dropped from 1m high



### NOTE:

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

