

multi-crystalline solar modules series

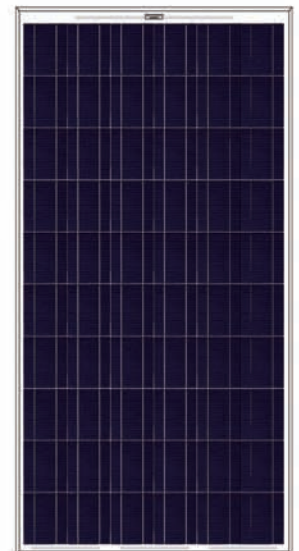
## 190W/18V---230W/18V

### Performance

**Warranty**                      90% power output over 12 years  
                                       80% power output over 25 years  
                                       Free from defects in materials and workmanship for 5 years

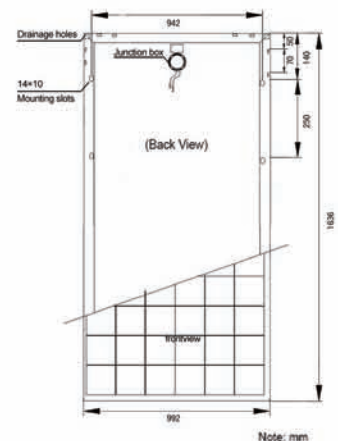
### Qualification Test

Temperature cycling range                      - 40°C to +85°C for 200 cycles  
 Damp heat test                                    85°C and 85% relative humidity for 1000h  
 Front & rear static load test (eg: wind)       2400Pa  
 Front load test (eg: snow)                      5400Pa  
 Hailstone impact test                            25mm hail at 23m/s from 1m distance



### Typical Electrical Characteristics

ELECTRICAL CHARACTERISTICS										
156X156 POLY SOLAR CELL										
CELL TYPE	190W 18V	195W 18V	200W 18V	205W 18V	210W 18V	215W 18V	220W 18V	225W 18V	230W 18V	
ITEM										
MAX Power(Wp)	190	195	200	205	210	215	220	225	230	
MAX Power Voltage(Vm)	28.80	28.80	28.90	28.90	29.00	29.10	29.20	29.30	29.40	
MAX Power Current(Imp)	6.60	6.78	6.92	7.09	7.24	7.40	7.53	7.68	7.82	
Open circuit Voltage (Voc)	36.00	36.10	36.20	36.30	36.30	36.30	36.30	36.40	36.40	
Short circuit Current (Isc)	6.94	7.13	7.31	7.49	7.65	7.80	7.97	8.13	8.31	
MAX Series Fuse	15A									
No. of Diode	3									
Number of cells	60									
MAX system voltage	1000VDC									
Temperature coefficients of Pm	-0.37%/°C									
Temperature coefficients of Voc	-0.34%/°C									
Temperature coefficients of Isc	0.09%/°C									
Nominal Operating Cell Temperature	45°C ± 2°C									
Output tolerance	±3%									
Standard Test conditions	STC: AM1.5 1000W/M2, Module Temperature									



### Mechanical Characteristics

Dimensions (mm)                      1636×992×35  
 Weight (kg)                                18kg  
 Solar cells                                60 cells (156mm×156mm) configured geometrically for a 6×10 matrix connected in series.  
 Out put cables lengths (mm)        900  
 Diodes number                            3  
 Construction                            Front: High transmission 3.2mm tempered glass.  
    Rear: White TPT; Encapsulant: EVA.

210W Curves

