

## Poly-Crystalline Solar PV Module 36 Cells Series



Electrical Characteristics							
Specification	FY1-90P	FY1-95P	FY1-100P	FY1-105P	FY1-110P	FY1-115P	FY1-120P
Rating power at STC (Wp)	90W	95W	100W	105W	110W	115W	120W
Open circuit voltage (Voc)	21.7V	22.0V	21.7V	22.0V	22.2V	22.3V	22.4V
Short circuit current (lsc)	5.31A	5.53A	5.90A	6.12A	6.35A	6.61A	6.86A
Rated voltage (Vm)	17.21	17.34V	17.45V	17.56V	17.66V	17.75V	17.83V
Rated current (Im)	5.23A	5.48A	5.73A	5.98A	6.23A	6.48A	6.73A
Module efficiency (%)	12.05%	12.72%	13.39%	14.06%	14.72%	15.39%	16.06%
Power tolerance	0 - 3 % (W)						
Temperature coefficient of Pm	-0.47%/K						
Temperature coefficient of lsc	+0.038%/K						
Temperature coefficient of Voc	-0.34%/K						
Maximum system voltage	DC600v (UL) / DC1000V (IEC)						
All technical data at STC: AM1.5; 1000W/m <sup>2</sup> ; 25°C							

Mechanical Characteristics				
Solar Cell	Polycrystalline			
No. of cells	36 (4X9)			
Nominal Operating Cell Temperature (NOCT)	46 ± 2 °C			
Operation temperature	From -40 to + 85°C			
Typical Application	12V DC			
Max series fuse rating	10A			
Max wind resistance	2400Pa			
Surface max. load capacity	5400Pa			
Weight	8.5kg			
Dimension	1115X670X35MM			

## Performance

• Water resistant junction box with bypass diode and high strength polymer sheet on module's rear ensures module is sealed from moisture and mechanical damage

- · High transmissivity low-iron toughened glass
- Excellent week light performance
- Unique drainage hole design and anodized aluminum frame

## **Quality and Reliability**

- Superior reliability with guaranteed 0~3% power output tolerance
- 10 years warranty on materials and workmanship,
- 25 years linear power warranty, 97% in the first year, 91% in 10<sup>th</sup> year, and ending with 80% in 25<sup>th</sup> year
- Cells are individually tested, characterized and modulated prior to interconnection
- Test and produce standard: IEC61215, IEC61730, ISO 9001:2008, ISO14001:2004, OHSAS18001:2007, TIS18001:2011, TIS1843:2553, TIS2580:2555

