



Wuxi Guofei Green Energy Source Co., Ltd.

Specifications of GFM180 Photovoltaic Modules

1. Electrical characteristics

*P_{max}, Voc, Isc, V_{mp} and Imp at STC(1000W/m²,25±2 °C,AM 1.5); Test of the power:+5w/-0w,
Tolerance of Other electrical characteristics: +/-10%*

Maximum Power(P _{max})	150W	155W	160W	165W	170W	175W	180W	185W	190W
Open Circuit Voltage(Voc)	43.7V	43.7V	44.0V	44.0V	44.4V	44.6V	44.8V	44.8V	44.8V
Short Circuit Current(Isc)	4.83A	4.99A	5.10A	5.36A	5.41A	5.43A	5.48A	5.51A	5.62A
Maximum Power Voltage(V _{mp})	34.5V	34.7V	35.0V	35.0V	35.6V	35.8V	36.0V	36.2V	36.4V
Maximum Power Current(Imp)	4.35A	4.47A	4.57A	4.71A	4.77A	4.88A	5.00A	5.11A	5.20A
Nominal OperationCell Temperature (NOCT)	46°C±2°C								
Temperature Coefficients of P _{max}	-0.47%/°C								
Temperature Coefficients of Voc	-0.38%/°C								
Temperature Coefficients of Isc	+0.10%/°C								
Temperature Coefficients of V _{mp}	-0.38%/°C								
Temperature Coefficients of Imp	+0.10%/°C								
Maximum System Voltage(V)	1000V								
Maximum series Fuse Rating	10A								
FF(%)	71~75								
Cell Efficiency(%)	14.8~18.7								

2. Mechanical Characteristics

Cell Technology	125mm×125mm Mono-crystalline Silicon Cells
Number of Cells(Pcs)	72(12×6)
Dimensions	1580mm×808mm×50mm
Length of Cables(mm)	900
Weight	16Kg
Frame	Aluminium -alloy
Backing	TPT

3. Qualification test parameters

Temperature cycling rang	50 and 200 cycles at -40°C~+85°C
Mechanical load test	2400Pa
damp heat	1000h at +85°C,85RH%
Allowable hail impact	25mm diameter ice ball at 23m/s,directed at 11 impact locations
Humidity freeze	10 cycles at -40°C~+85°C,85RH%

Warranty: 90% for 10 years, 80% for 25 years ,product guaranty 2 years

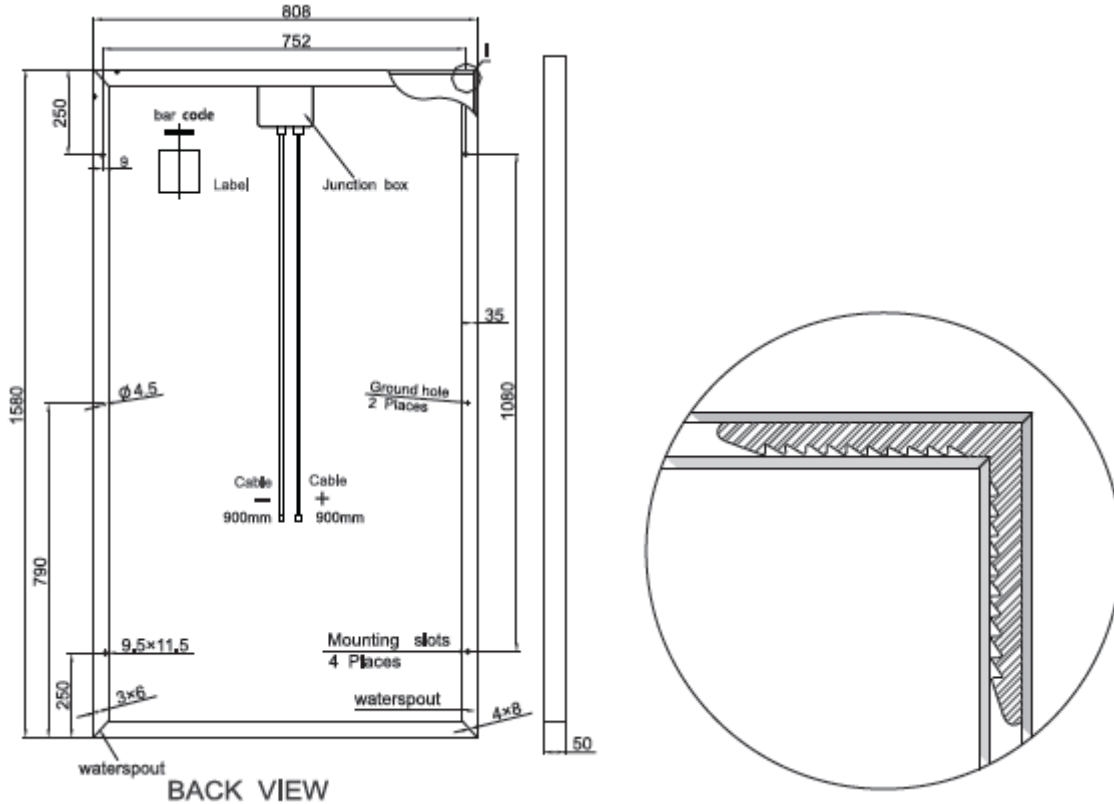


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4. Quality and Safety

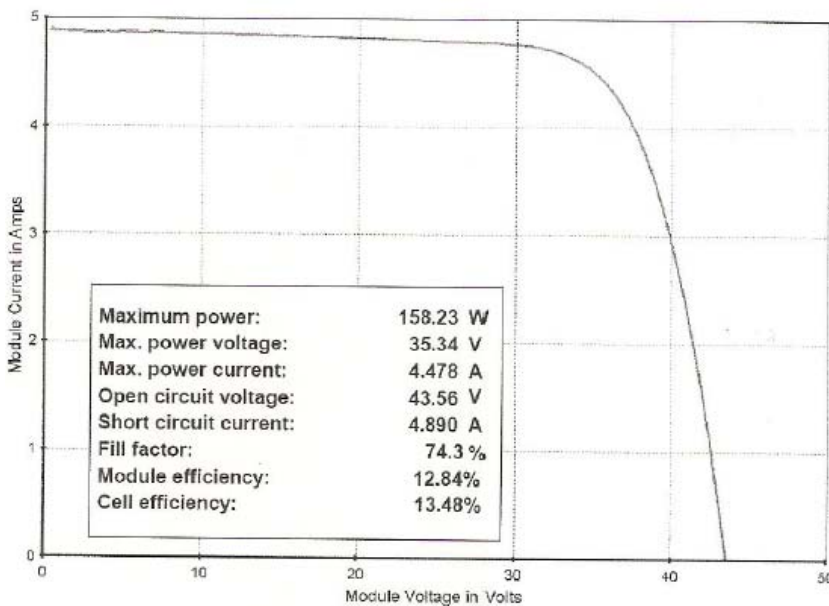
IEC61215	yes
Safety Class II	yes
CE	yes
ISO9001	yes

5. Basic Dimensions



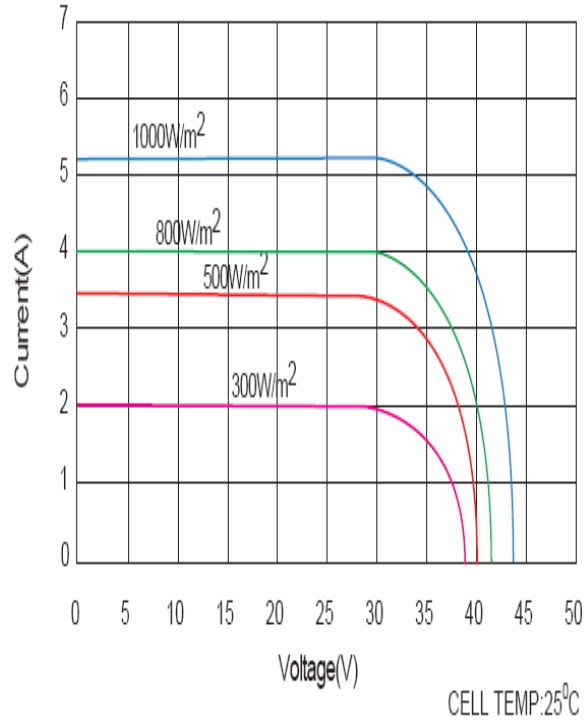
6. I-V characteristic curve

6.1 I-V characteristic curve of module at STC





6. 2 I-V characteristic curve at various irradiance levels



6. 3 I-V characteristic curve at various cell temperatures

