

GES-5M190

180~200 Watt Monocrystalline Photovoltaic Module



Strict Inspection

Double EL testing of each panel ensures no micro-cracks or mismatch on cells;



More Power

High efficiency ensures high ROI;
0~+5W power tolerance;



ISO certified & IEC standards

ISO 9001:2008 certified factory;
IEC 5400 Pa mechanical loading test;
Ammonia Endurance Test (IEC62716);
Salt Mist Test (IEC61701);



Linear Warranty, Low Degradation

Aging test under 85°C and 85% relative humidity for at least 1500 hours;
3% degradation rate the first year;
0.71% yearly linear degradation;
10 years warranty on materials and workmanship;
25 years warranty on 80% Min. power output;



Extra Value

Products Warranty Insurance (Power Guard);
Product Liability Insurance (CHUBB);
Financial Injury (E&O) Liability Insurance (CHUBB).



No. Z2 11 05 74112 009
No. Z2 11 05 74112 007



No. 20120829-E330812



N8 11 05 74112 008
N8 11 05 74112 006



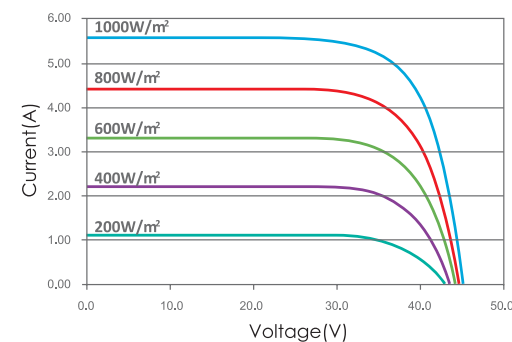
Electrical Characteristics

Characteristics	Unit	GES-5M180	GES-5M185	GES-5M190	GES-5M195	GES-5M200
Max. Power (Pmax)	W	180	185	190	195	200
Power Tolerance	W	(0,+5)	(0,+5)	(0,+5)	(0,+5)	(0,+5)
Open Circuit Voltage (Voc)	V	44.7	44.9	45.1	45.2	45.7
Short Circuit Current (Isc)	A	5.54	5.60	5.66	5.71	5.78
Max. Power Voltage (Vmp)	V	36.2	36.4	36.5	36.6	37.0
Max. Power Current (Imp)	A	4.97	5.09	5.20	5.33	5.40
Module Efficiency (ηm)	%	14.1	14.5	14.9	15.3	15.7
Pmax Temperature Coefficient	%/°C	-0.44				
Voc Temperature Coefficient	%/°C	-0.32				
Isc Temperature Coefficient	%/°C	+0.04				
Max. System Voltage	VDC	1000(TUV);600(UL)				
Max. Series Fuse Rating	A	10				
Operating Temperature	°C	-40~+85				
NOCT	°C	45±2				

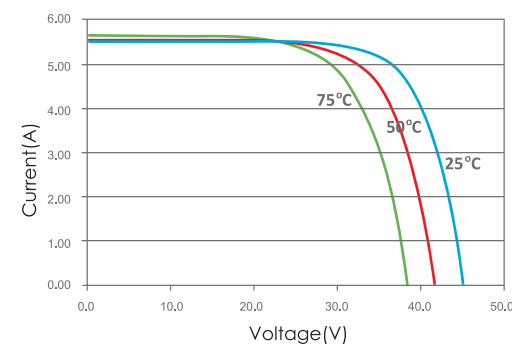
STC: 1000W/m², AM1.5 and 25°C cell temperature; NOCT: Nominal Operating Cell Temperature

I-V Curves

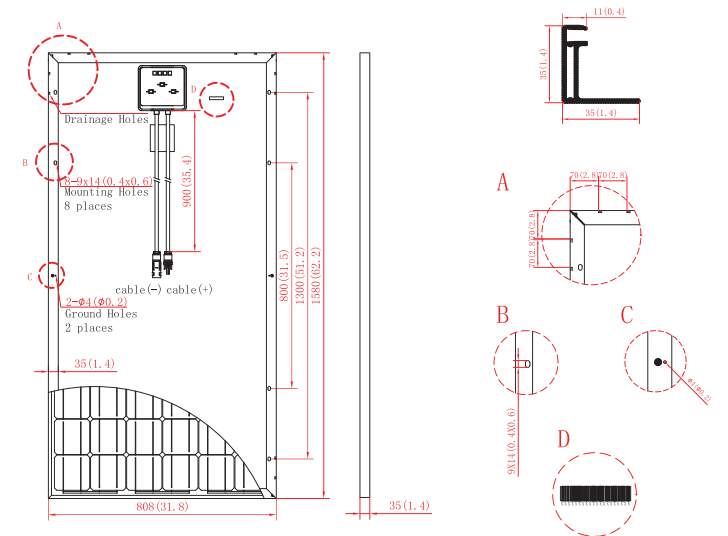
I-V Curves of PV Modules GES-5M190
(Cell Temp. 25°C)



I-V Curves of PV Module GES-5M190
at Different Cell Temp. (AM1.5, 1000W/m²)



Physical Characteristics Unit: mm(inch)



Cell Type	125mm x 125mm, Monocrystalline Silicon
No. of Cells	72pcs (6x12)
Dimension	1580x808x35mm (62.6x31.8x1.4inch)
Weight	16.0kg (35.3lbs.)
Cable Length	900mm (35.4inch)
Bypass Diodes	3pcs
Junction Box	IP65
Front Glass	3.2mm (0.1inch) tempered low-iron glass
Frame	Anodized aluminum alloy

* Specifications are subjected to change without further notice