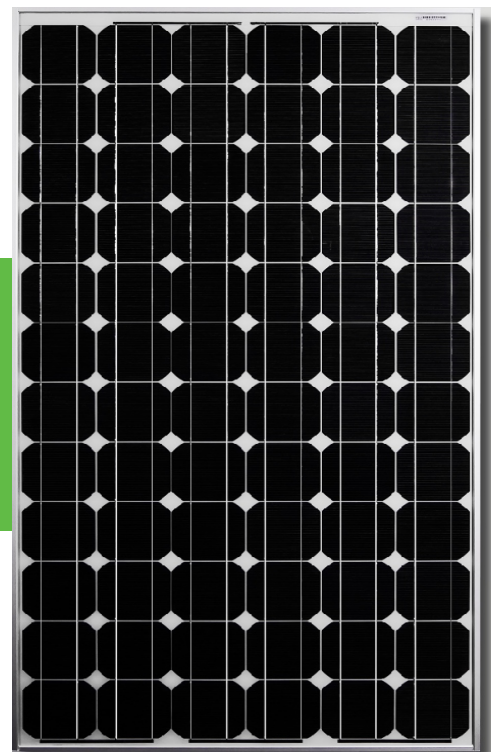




# QG 170~190-5M



## Features

*This mold of solar module has 72 solar cells.  
They can be used for on-grid and off-grid solar applications.  
Our meticulous design and production techniques ensure a high-yield,  
long-term performance for every module produced.*

## Applications

- *On-grid and off-grid residential roof-tops*
- *On-grid and off-grid commercial/industrial roof-tops*
- *Water Pumping systems*
- *Rural area applications*
- *etc.*

## Features

- *5 years product warranty on material and workmanship  
10 years limited warranty of 90% output  
25 years limited warranty of 80% output*
- *Strong framed module, passing mechanical load  
test of 5400Pa to withstand heavier snow load*
- *Industry leading power tolerance:  $\pm 3\%$*

## Qualifications

- *IEC 61215 , IEC 61730 , CE*
- *ISO9001:2008: Standards for quality management systems*



## Electrical Characteristics

Characteristics	QG190-5M	QG 185-5M	QG 180-5M	QG 175-5M	QG 170-5M
Open - Circuit voltage (Voc)	44.8V	44.6V	44.6V	44.3V	44.3V
Optimum Operating Voltage (Vmp)	36.6V	36.4V	36.1V	35.8V	35.6V
Short - Circuit Current (Isc)	5.52A	5.46A	5.34A	5.23A	5.12A
Optimum Operating Current (Imp)	5.19A	5.09A	4.99A	4.89A	4.78A
Maximum Power at STC (Pmax)	190 Wp	185Wp	180Wp	175Wp	170Wp
Operating Temperature	-40°C to +85°C				
Maximum System Voltage	1000V DC				
Maximum Series Fuse Rating	15A				
Power Tolerance	±3 %				

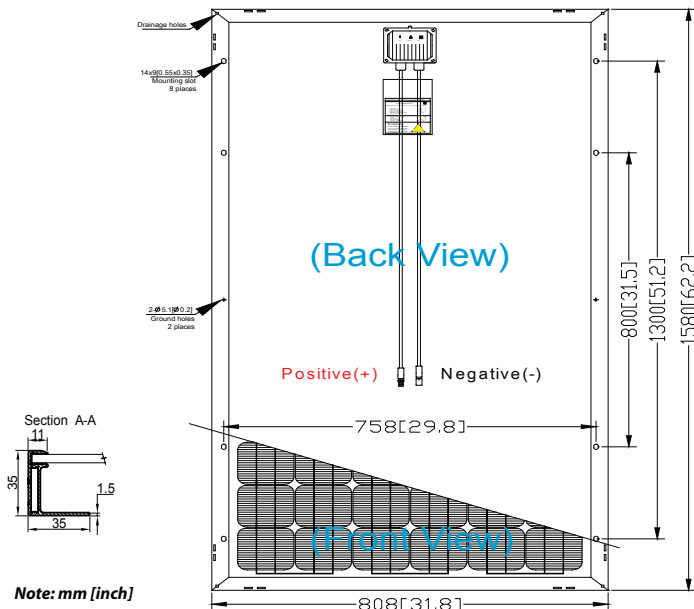
\*STC : Irradiance 1000W/m<sup>2</sup>, Module temperature 25°C, AM=1.5

## Mechanical Characteristics

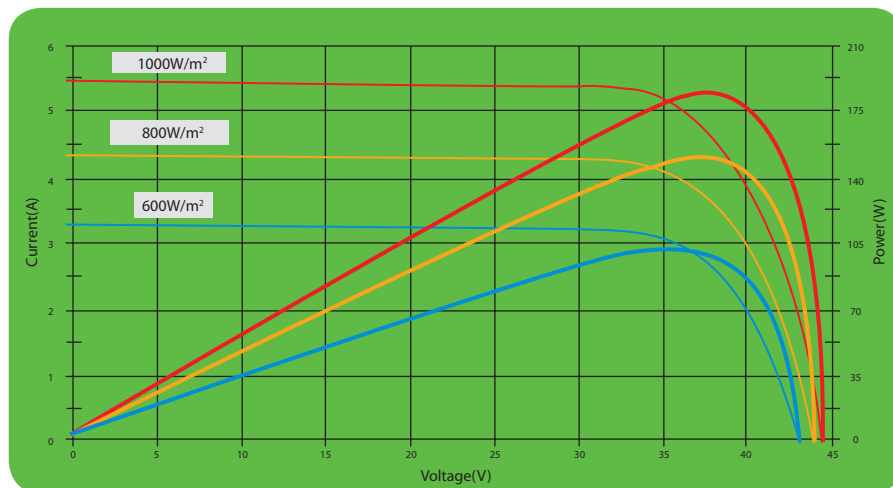
Solar Cell	Mono-crystalline 125x125mm (5inch)
No. of Cells	72 (6x12)
Dimensions	1580x808x35mm (62.2x31.8x1.4inch)
Weight	15.5kg (34.1lbs.)
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65
Output Cables	(-) 1000mm (39.4inch) (+) 1000mm (39.4inch) MC4 connectors

## Temperature Characteristics

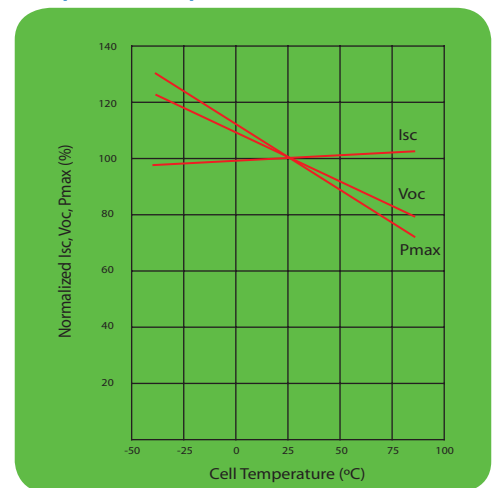
Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.48 %/°C
Temperature Coefficient of Voc	-0.34 %/°C
Temperature Coefficient of Isc	0.037 %/°C



## Current-Voltage & Power-Voltage Curve (185W)



## Temperature Dependence of Isc, Voc, Pmax



Add: No.2318#6,XingHua Rd  
 Jiading District Shanghai  
 Zip: 201812  
 Tel: +86 21 61846188  
 Fax: +86 21 39116333 x 653  
 E-mail: sales@qgsolarenergy.com  
 Http: //www.qgsolarenergy.com