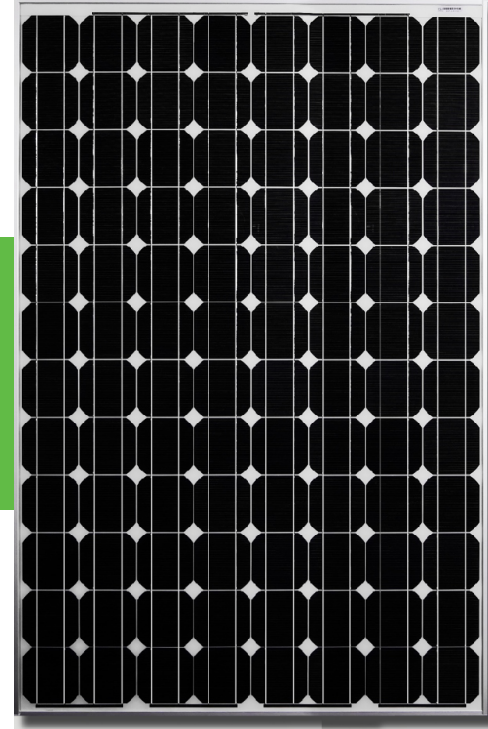




# QG 230~250-5M



## Features

***This mold of solar module has 96 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

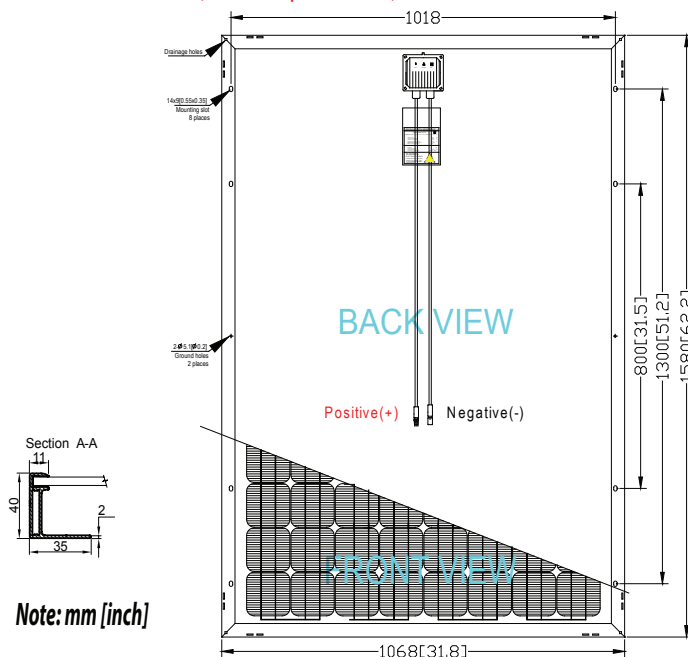
- ***IEC 61215 , IEC 61730 , CE***
- ***ISO9001:2008: Standards for quality management systems***



## Electrical Characteristics

Characteristics	QG250-5M	QG 245-5M	QG 240-5M	QG 235-5M	QG 230-5M
Open - Circuit voltage (Voc)	59.6V	59.5V	59.4V	59.2V	59.1V
Optimum Operating Voltage (Vmp)	48.7V	48.4V	48.1V	47.7V	47.5V
Short - Circuit Current (Isc)	5.49A	5.43A	5.34A	5.27A	5.18A
Optimum Operating Current (Imp)	5.14A	5.06A	4.99A	4.93A	4.84A
Maximum Power at STC (Pmax)	250 Wp	245Wp	240Wp	235Wp	230Wp
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



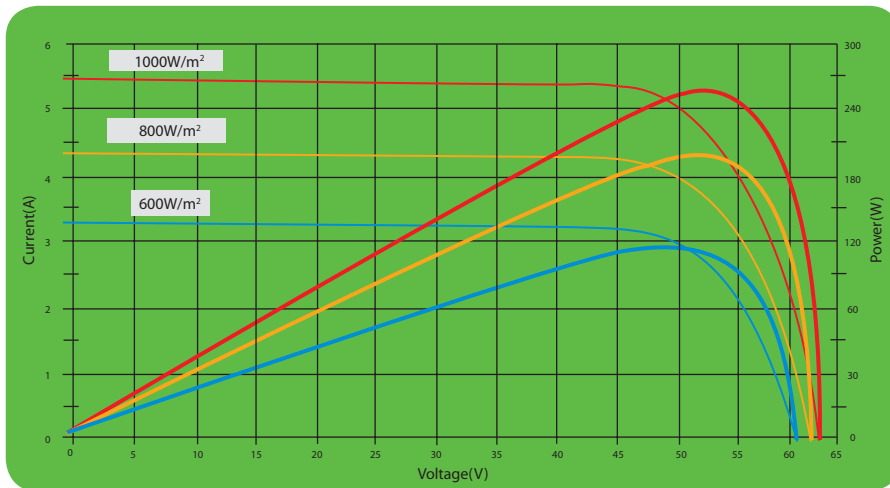
## Mechanical Characteristics

Solar Cell	Mono-crystalline 125x125mm (5inch)
No. of Cells	96 (8x12)
Dimensions	1580x1068x40mm (62.2x42.0x1.57inch)
Weight	20kg (44.1lbs.)
Front Glass	3.2 mm tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP65
Output Cables	(-) 1000mm (39.4inch) (+) 1000mm (39.4inch) MC4 connectors

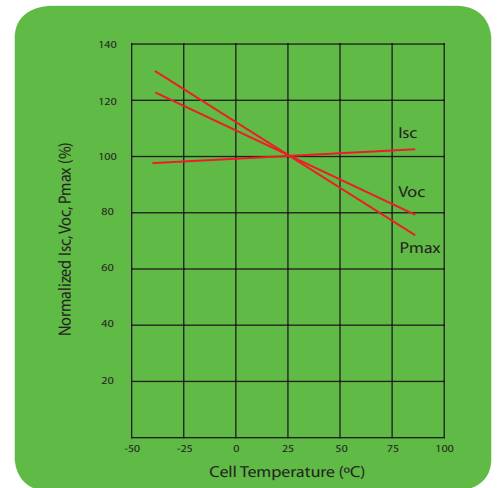
## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45±2°C
Temperature Coefficient of Pmax	-0.45 %/°C
Temperature Coefficient of Voc	-0.35 %/°C
Temperature Coefficient of Isc	0.06 %/°C

## Current-Voltage & Power-Voltage Curve (250W)



## Temperature Dependence of Isc, Voc, Pmax



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