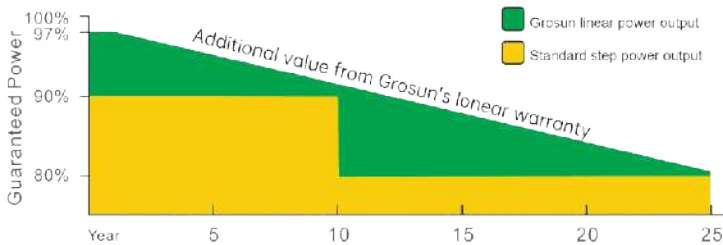




# MONO MODULE

## GS-M60-5BB 300-315W

**About Grosun Solar:** Grosun New Energy Technology Co.,Ltd—Chinese leading producer of Solar PV products and Solar power system. We manufacture high efficiency, superior affordable Photovoltaic panels. Our downstream business includes solar photovoltaic project development, design, EPC construction, operation & maintenance and one-stop system integration solutions for customers.



## PRODUCT CHARACTERISTICS



**Higher Conversion Efficiency**

With new generation of PERC technology, the average conversion efficiency of the cells could reach 21.9%



**Outstanding mechanical load resistance**

3800 Pa wind load, 5400 Pa snow load



**High performance under low light**

Works at cloudy, rainy days



**Anti-PID (potential induced degradation)**

Passed anti-PID test under 85% damp heat, 85% relative humidity for 96 hours



**Great Durability against extreme conditions**

Passed salt mist corrosion test, ammonia corrosion test, dust & sand test, fire test, all certified by TÜV



**Double electroluminescence (EL) tests**

Carefully inspected before and after lamination to guarantee fault-free modules

# MONO MODULE GS-M60-5BB 300-315W

## ELECTRICAL PERFORMANCE

Electrical Parameters Standard Test Conditions

Module Type		GS-M60-5BB 300-315W				
Power Output	P <sub>max</sub>	W	300W	310W	310W	315W
Power Tolerance	ΔP <sub>max</sub>	W	0/+5W			
Module Efficiency	η <sub>m</sub>	%	18.4%	18.7%	19%	19.3%
Voltage at P <sub>max</sub>	V <sub>m</sub>	V	32.7	32.9	33.2	33.4
Current at P <sub>max</sub>	I <sub>m</sub>	A	9.17	9.27	9.34	9.43
Open-Circuit Voltage	V <sub>oc</sub>	V	39.8	40	40.3	40.5
Short-Circuit Current	I <sub>sc</sub>	A	9.66	9.76	9.83	9.9

STC:1000W/m<sup>2</sup> irradiance,25°C module temperature,AM1.5

## THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	45±2
Temperature Coefficient of P <sub>max</sub>	γ	%/°C	-0.390
Temperature Coefficient of V <sub>oc</sub>	β <sub>voc</sub>	%/°C	-0.330
Temperature Coefficient of I <sub>sc</sub>	α <sub>isc</sub>	%/°C	+0.049

## OPERATING CONDITIONS

Max.System Voltage	1500V
Max.Series Fuse Rating	15A
Operating Temperature Range	-40°C~85°C
Max static snow load	5400Pa
Max static wind load	3800Pa
Application Class	A
Fire Resistance Class	C

## CONSTRUCTION MATERIALS

Front Cover(material/type/thickness)	low-iron tempered glass/3.2mm
Cell(quantity/material/type/dimension)	60/monocrystalline/156.75x156.75mm
Encapsulant(material)	ethylene vinyl acetate(EVA)
Frame(material/anodization color)	anodized aluminum alloy/silver or black
Junction Box(protection degree)	IP68
Cable(length/cross-sectional area)	900mm/4mm <sup>2</sup>
Plug Connector	MC4 compatible

## GENERAL CHARACTERISTICS

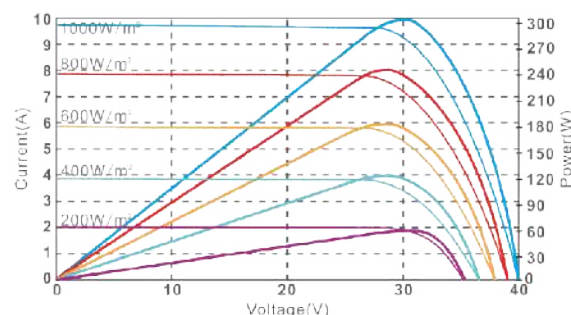
Dimension(L/W/H)	1642/992/35mm
Weight	18kg

## PACKING CONFIGURATION

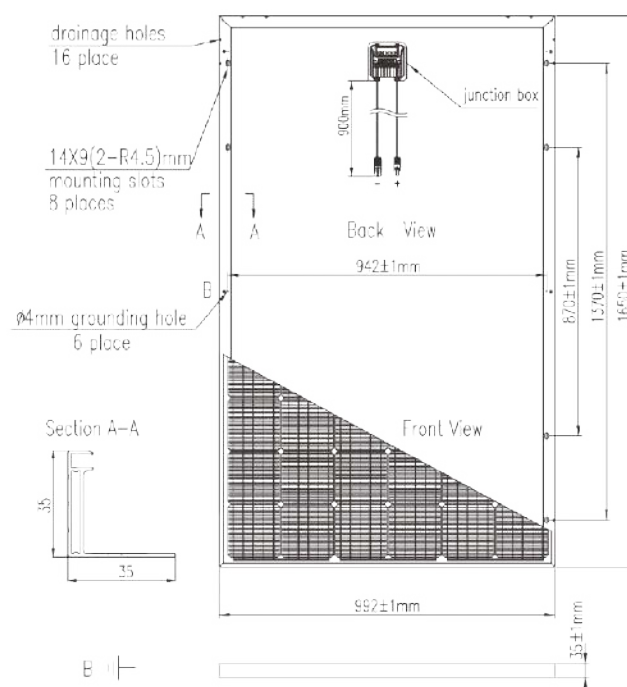
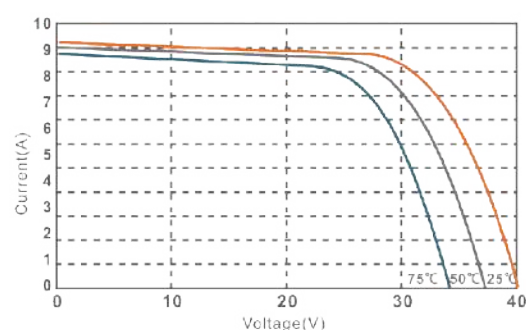
Pallet Size(L/W/H)	1690/1120/2440mm
Pallet Weight	1260kg
Pieces per Pallet	60pcs+4pcs
Pieces per Container	896pcs

## I-V CURVE

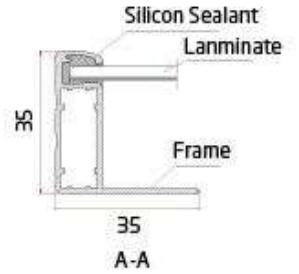
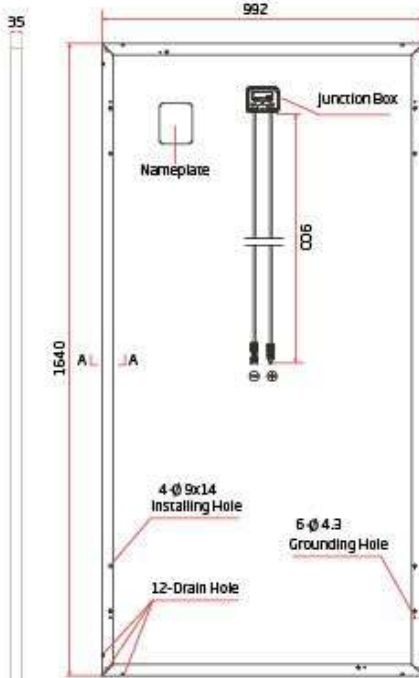
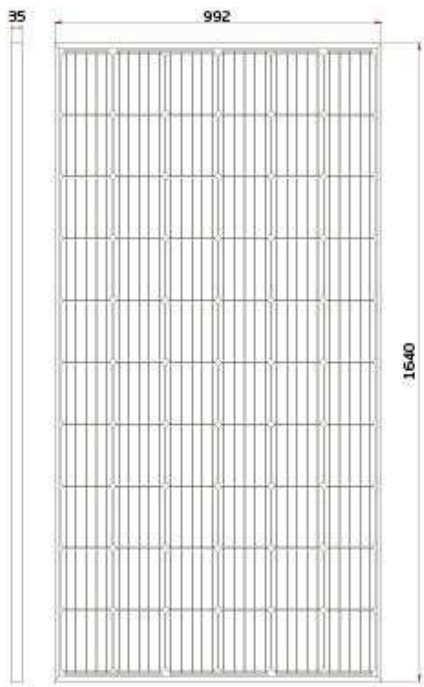
I-V characteristics at different irradiances



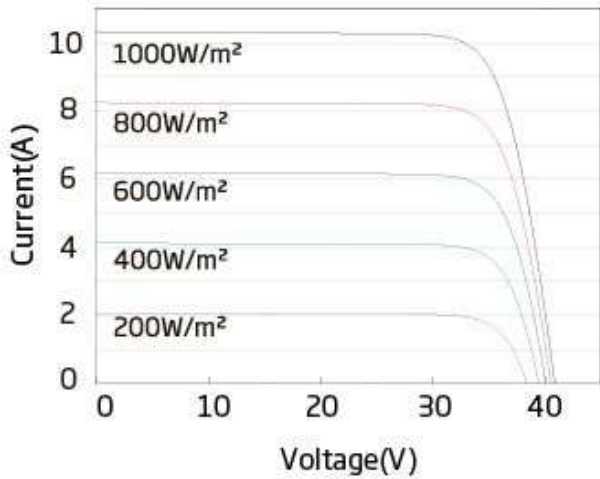
I-V characteristics at different temperature



Please read the instruction entirely before handling, installing and operating Grosun's Solar modules.  
Due to continuous research and development, the specification is subject to change without prior notice.



**I-V CURVES OF PV MODULE(320W)**



**P-V CURVES OF PV MODULE(320W)**

