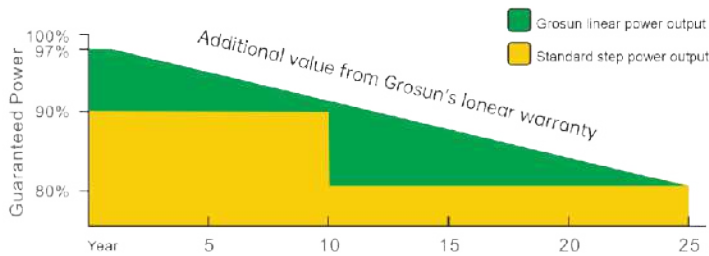
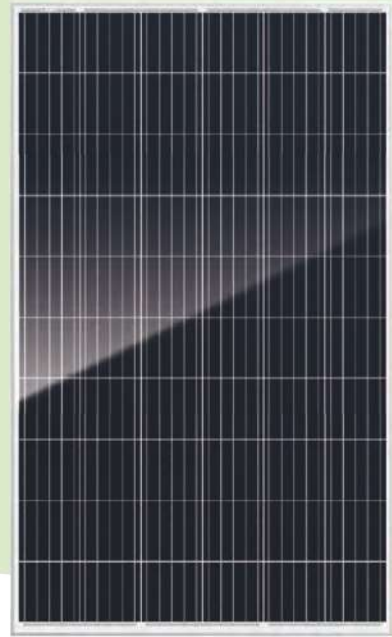




MONO MODULE GS-P60-5BB 275-290W

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.



25 year product warranty



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-P60-5BB 275-290W

ELECTRICAL PERFORMANCE

Electrical Parameters Standard Test Conditions

Module Type		GS-P60-5BB 275-290W				
Power Output	P _{max}	W	275W	280W	285W	290W
Power Tolerance	ΔP _{max}	W	0/+5%			
Module Efficiency	η _m	%	16.9	17.2	17.5	17.8
Voltage at P _{max}	V _m	V	32.1	32.4	32.6	32.9
Current at P _{max}	I _m	A	8.57	8.64	8.74	8.81
Open-Circuit Voltage	V _{oc}	V	38.1	39	39.3	39.6
Short-Circuit Current	I _{sc}	A	9.19	9.27	9.36	9.44

STC:1000w/m² irradiance,25°C module temperature,AM1.5

THERMAL CHARACTERISTICS

Nominal Operating Cell Temperature	NOCT	°C	45±2
Temperature Coefficient of P _{max}	γ	%/°C	-0.403
Temperature Coefficient of V _{oc}	β _{voc}	%/°C	-0.390
Temperature Coefficient of I _{sc}	α _{isc}	%/°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

CONSTRUCTION MATERIALS

Front Cover(material/type/thickness)	low-iron tempered glass/3.2mm
Cell(quantity/material/type/dimension)	60/polycrystalline/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 ²
Plug Connector	MC4 compatible

GENERAL CHARACTERISTICS

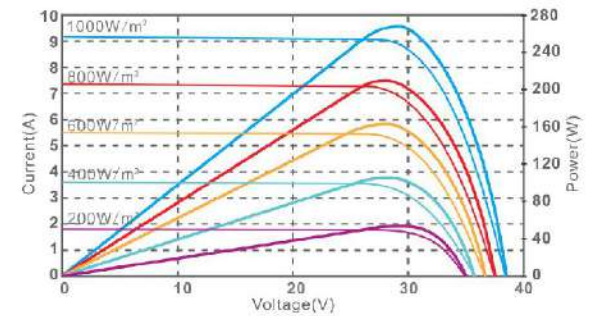
Dimension(L/W/H)	1650/992/35mm
Weight	18kg

PACKING CONFIGURATION

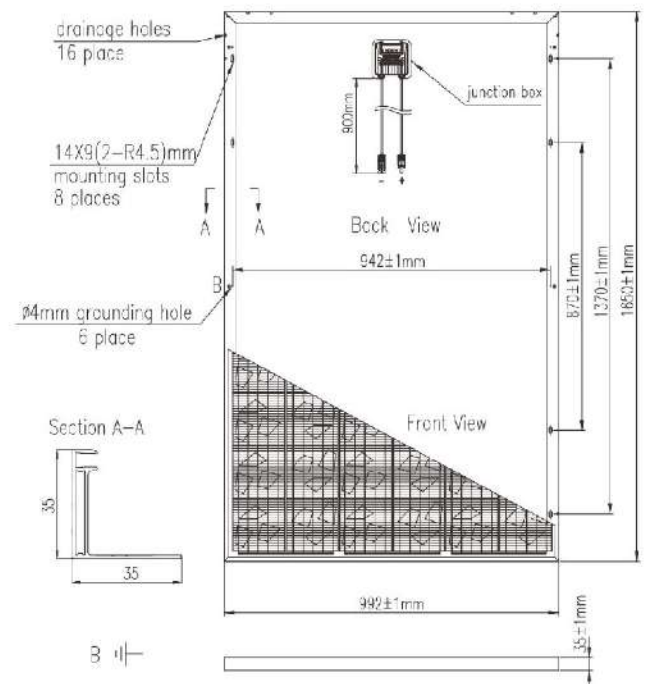
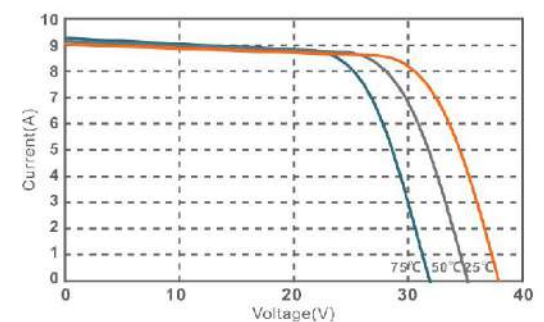
Pallet Size(L/W/H)	1690/1120/2440mm
Pallet Weight	1260kg
Pieces per Pallet	60pcs+4pcs
Pieces per Container	896pcs

I-V CURVE

I-V characteristics at different irradiances

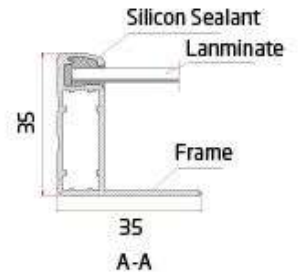
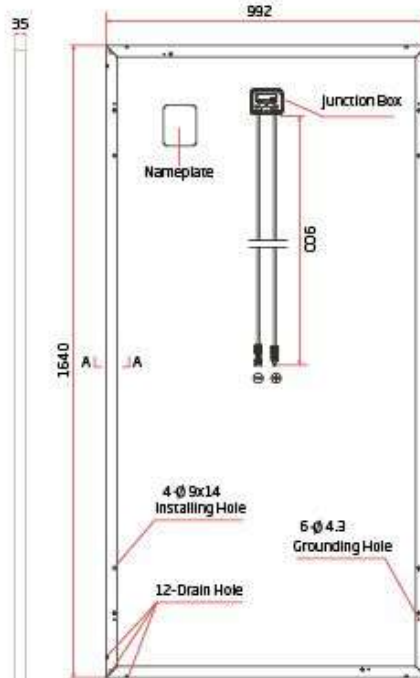
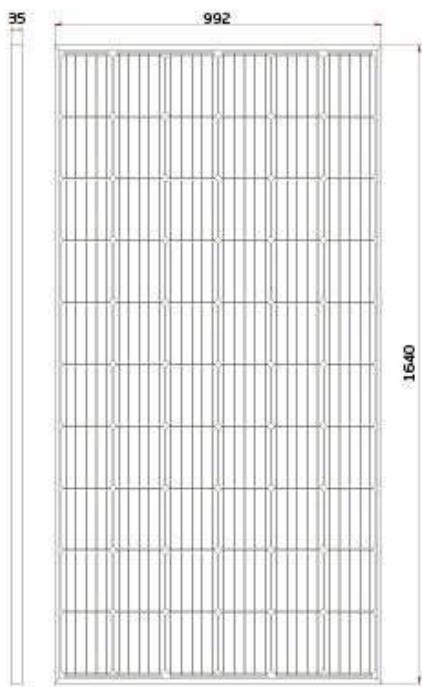


I-V characteristics at different temperature

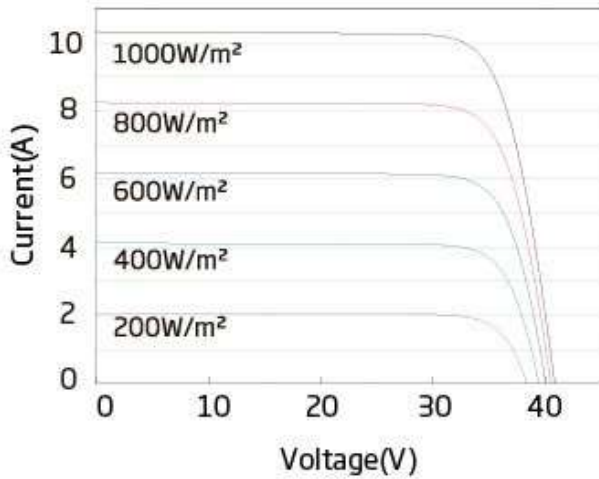


Please read the instruction entirely before handling, installing and operating Ulica Solar modules.

Due to continuous research and development, the specification is subject to change without prior notice.



I-V CURVES OF PV MODULE(280W)



P-V CURVES OF PV MODULE(280W)

