

## 230 - 250Watt

### POLYCRYSTALLINE SOLAR MODULE

#### Features



#### High Module Conversion Efficiency

Up to 15.6%, through superior cell technology and leading manufacturing capability



#### Proven Tolerance

Proven field tolerance  $\pm 3\%$  ensures reliable power output



#### Self Clean Effect

Anti-reflective, hydrophobic layer improves light absorption and reduces surface dust



#### Excellent Weak Light Performance

Excellent performance under low light environments to capture early morning and late evening sunlight



#### World Class Manufacturing Facilities

Our manufacturing facilities are ISO certified for Quality assurance and delivers world class products

#### Certifications and standards:



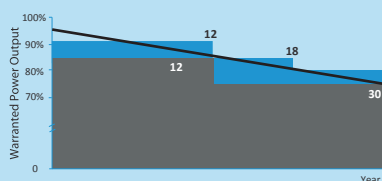
#### Panel Insured By



#### Trust USGXXX-60 Series for Reliable Performance Over

- World's trusted manufacturer of crystalline silicon photovoltaic modules
- Un-rivalled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards
- Tested for harsh environment

#### Industry Leading Australian Local Warranty



- 30-year linear power output warranty: 12 years/91.2%, 30 years/80.6% \*\*
- Warrants more power than the market standard over 25 years
- 12-year product workmanship Warranty
- Based on nominal power (Pnom)

\* Please refer to Universal solar panel Standard Module Installation Manual for details.

\*\* Please refer to Universal solar Panel Product Warranty for details.



#### Superior Frame Design

Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.

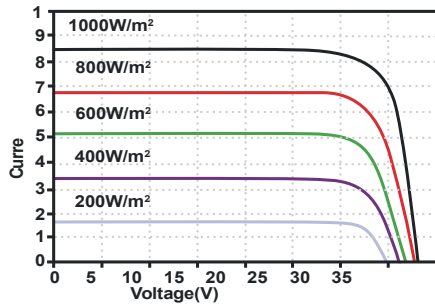


#### Most Modern IP65 Rated Junction Box

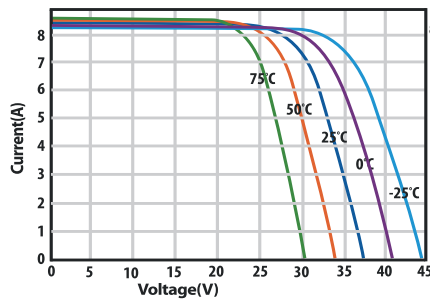
IP65 rated Supports any orientation installation. High performance low resistance connectors ensure maximum module power output for highest energy production.

# UNIVERSAL SOLAR USGXXX-60 SERIES

IRRADIATION IV CURVES OF USP-P6-60

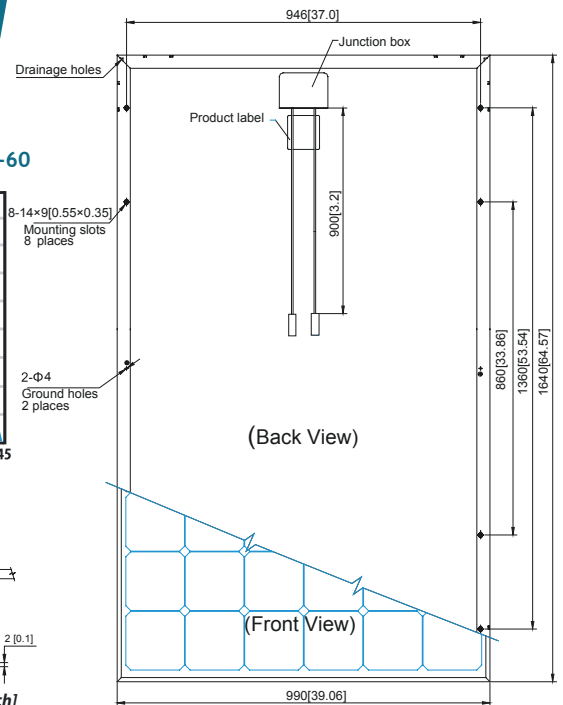
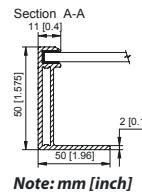


TEMPERATURE IV CURVES OF USP-P6-60



## TEMPERATURE RATINGS

Pmax Temperature Coefficient	%/°C	-0.47
Voc Temperature Coefficient	%/°C	-0.32
Isc Temperature Coefficient	%/°C	+0.04
Operating Temperature	°C	-40 ~ +85
Nominal Operating Cell Temperature (NOCT)	°C	45 ± 2



ALL UNITS OF MODEL USGXXX-60 SERIES PANELS MADE IN CHINA

## ELECTRICAL CHARACTERISTICS

Module Type	Unit	USG250-60	USG245-60	USG240-60	USG235-60	USG230-60
Rated Power at STC (Pmp)	W	250	245	240	235	230
Power tolerance	%	<b>±3</b>	<b>±3</b>	<b>±3</b>	<b>±3</b>	<b>±3</b>
Cell Efficiency (nc)	%	17.9	17.5	17.2	16.8	16.5
Minimum Module Efficiency (nm)	%	15.6	15.2	14.9	14.6	14.3
Maximum Power Voltage (Vmp)	V	30.3	30.2	30.0	30.0	29.9
Maximum Power Current (Imp)	A	8.35	8.17	8.0	7.83	7.67
Open Circuit Voltage (Voc)	V	37.2	37.2	37.2	37.1	37.0
Short Circuit Current (Isc)	A	9.58	9.39	9.20	9.01	8.82
Maximum System Voltage	V	1000				
Maximum Series Fuse Rating	A	15				

STC: Irradiance 1000 W/m<sup>2</sup>, Module Temperature 25°C, Air Mass 1.5

## MECHANICAL CHARACTERISTICS

External Dimension	1640 × 990 × 50 mm
Weight	20.0 kg
Solar Cells	60 pieces Polycrystalline 156 × 156 mm
Front glass	3.2 mm tempered low iron glass
Frame	Anodized / Electrophoretic Aluminium
Junction Box	IP65 rated
Output Cables	4.0 mm <sup>2</sup> , symmetrical lengths 900 mm
Connector	Cixi Yineng Photovoltaic Technology

## PACKAGING

Modules Per Pallet	28
Pallet Dimension	1650 x 1115 x 995 mm
Pallet Weight	570 kg

## Dealer Information



Specifications are subject to change without further notification