



230 - 250Watt

POLYCRYSTALLINE SOLAR MODULE

Features



High Module Conversion Efficiency

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



Positive Tolerance

Proven field tolerance 0-5% ensures reliable power output



Intensive Wind and Snow Load Tests

Entire module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) *



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:



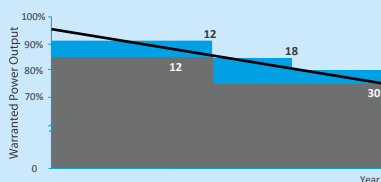
Panel Insured By



Trust USG P60 Series for Reliable Performance Over Time

- World's trusted manufacturer of crystalline silicon photovoltaic modules
- Un-rivaled 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.



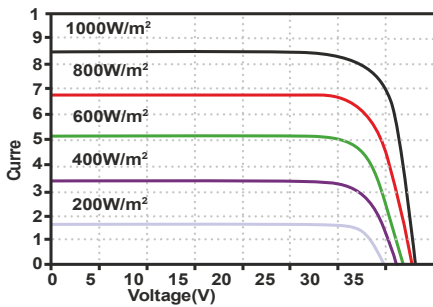
Most Modern IP65 Rated Junction Box

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

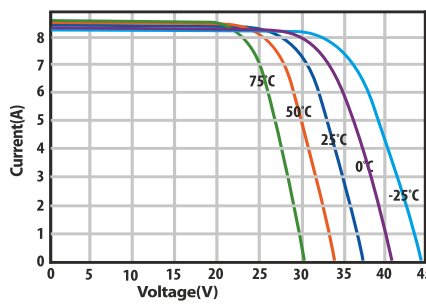
©Copyright 2014 Universal Solar Panel

UNIVERSAL SOLAR USP-P6-60 SERIES

IRRADIATION IV CURVES OF USP-P6-60

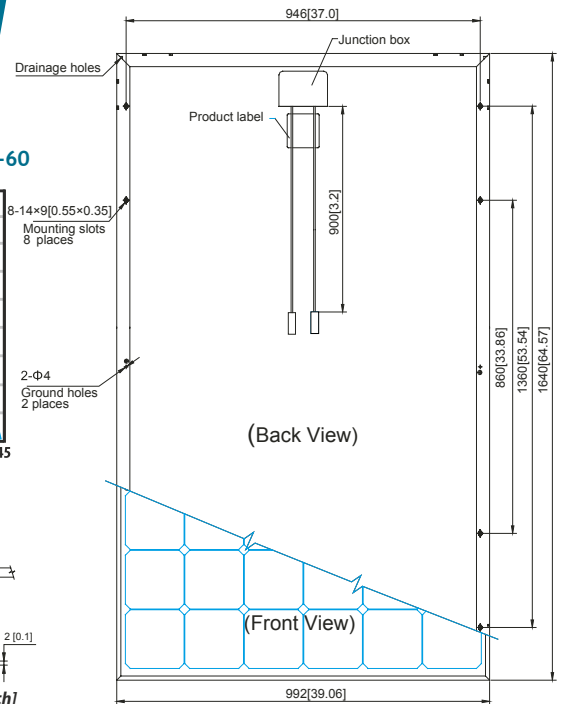
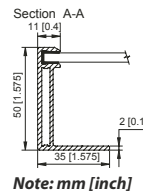


TEMPERATURE IV CURVES OF USP-P6-60



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 USP-P6-60 series panels made in China

ELECTRICAL CHARACTERISTICS

Module Type	Unit	USP P6-250/60	USP P6-245/60	USP P6-240/60	USP P6-235/60	USP P6-230/60
Rated Power at STC (Pmp)	W	250	245	240	235	230
Power tolerance	%	0-5	0-5	0-5	0-5	0-5
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	29.9	29.9	29.8	29.6	29.5
Maximum Power Current (Imp)	A	8.35	8.21	8.05	7.94	7.83
Open Circuit Voltage (Voc)	V	37.3	37.3	37.0	36.8	36.8
Short Circuit Current (Isc)	A	8.98	8.78	8.55	8.44	8.34
Maximum System Voltage	V	1000 (TUV)				
Maximum Series Fuse Rating	A	15				

STC: Irradiance 1000 W/m², Module Temperature 25°C, Air Mass 1.5

MECHANICAL CHARACTERISTICS

External Dimension	1640 × 990 × 35 mm
Weight	19.0 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 / IP67
Output Cables	4.0 mm ² , symmetrical lengths 900 mm
Connector	TL-CABLE01
Maximum Snow Load	550 kg/m ²
Maximum Wind Load	200 km/h
Hailstone Impact Test	80 km/h for 25 mm ice ball

PACKAGING

Modules Per Pallet	28
Pallet Dimension	1650 x 1115 x 995 mm
Pallet Weight	535 kg

Dealer Information



ACN: 164 371 313

UNIVERSALSOLARGROUP.COM.AU
SALES@UNIVERSALSOLARGROUP.COM.AU

Specifications are subject to change without further notification