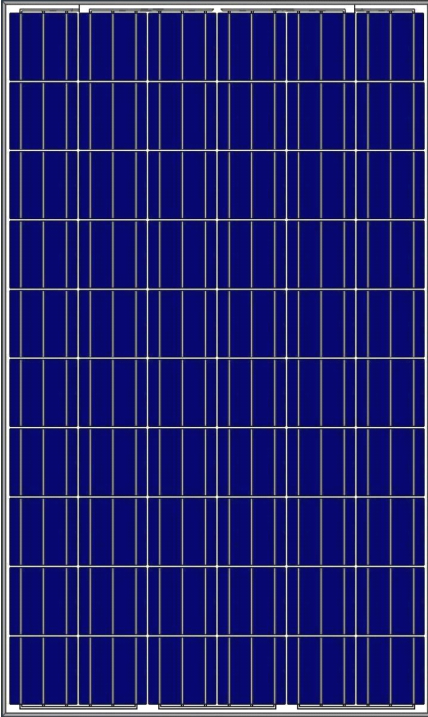




# AS-6P30

## POLYCRYSTALLINE MODULE



### ADVANCED PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 16.90% through advanced manufacturing technology.
- Low degradation and excellent performance under high temperature and low light conditions.
- Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.
- Positive power tolerance of 0 ~ +3 %.
- High ammonia and salt mist resistance.
- Potential induced degradation (PID) resistance.

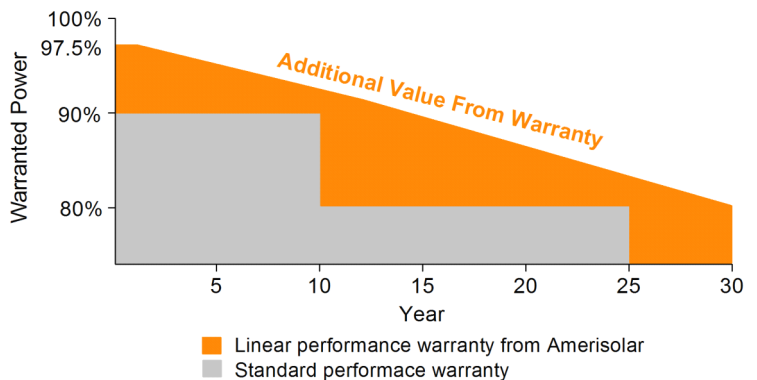
### CERTIFICATIONS

- IEC61215, IEC61730, IEC62716, IEC61701, UL1703, CE, ETL(USA), JET(Japan), J-PEC(Japan), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible (CA-USA), Israel Electric(Israel), Kemco(South Korea), InMetro(Brazil), TSE(Turkey)
- ISO9001:2008: Quality management system
- ISO14001:2004: Environmental management system
- OHSAS18001:2007: Occupational health and safety management system

**Passionately  
committed to  
delivering innovative  
energy solution**

### SPECIAL WARRANTY

- 12 year limited product warranty.
- Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



## ELECTRICAL CHARACTERISTICS AT STC

Nominal Power ( $P_{max}$ )	240W	245W	250W	255W	260W	265W	270W	275W
Open Circuit Voltage ( $V_{OC}$ )	37.7V	37.9V	38.0V	38.1V	38.2V	38.3V	38.4V	38.5V
Short Circuit Current ( $I_{SC}$ )	8.57A	8.66A	8.75A	8.83A	8.90A	8.98A	9.06A	9.15A
Voltage at Nominal Power ( $V_{mp}$ )	29.9V	30.1V	30.3V	30.5V	30.7V	30.9V	31.1V	31.3V
Current at Nominal Power ( $I_{mp}$ )	8.03A	8.14A	8.26A	8.37A	8.47A	8.58A	8.69A	8.79A
Module Efficiency (%)	14.75	15.06	15.37	15.67	15.98	16.29	16.60	16.90
Operating Temperature	-40°C to +85°C							
Maximum System Voltage	1000V DC							
Maximum Series Fuse Rating	15A							

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

## ELECTRICAL CHARACTERISTICS AT NOCT

Nominal Power ( $P_{max}$ )	177W	180W	184W	188W	191W	195W	199W	202W
Open Circuit Voltage ( $V_{OC}$ )	34.7V	34.9V	35.0V	35.1V	35.2V	35.3V	35.4V	35.5V
Short Circuit Current ( $I_{SC}$ )	6.94A	7.01A	7.09A	7.15A	7.21A	7.27A	7.34A	7.41A
Voltage at Nominal Power ( $V_{mp}$ )	27.2V	27.4V	27.6V	27.8V	27.9V	28.1V	28.3V	28.5V
Current at Nominal Power ( $I_{mp}$ )	6.51A	6.57A	6.67A	6.77A	6.85A	6.94A	7.04A	7.09A

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

Cell type	Polycrystalline 156x156mm(6x6inches)
Number of cells	60 (6x10)
Module dimensions	1640x992x40mm(64.57x39.06x1.57inches)
Weight	18.5kg(40.8lbs)
Front cover	3.2mm(0.13inches) low-iron tempered glass
Frame	Anodized aluminum alloy
Junction box	IP65 or IP67
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm(35.43inches)
Connector	MC4 or MC4 compatible

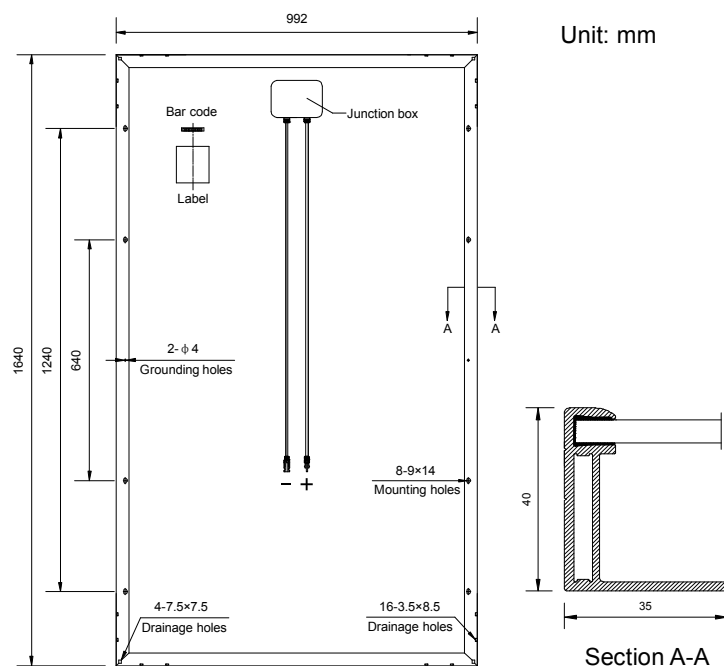
## MECHANICAL CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of $P_{max}$	-0.43%/°C
Temperature Coefficients of $V_{OC}$	-0.33%/°C
Temperature Coefficients of $I_{SC}$	0.056%/°C

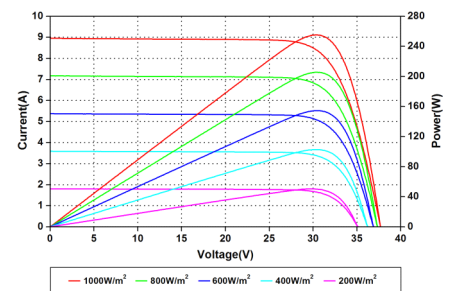
## PACKAGING

Standard packaging	26pcs/pallet
Module quantity per 20' container	312 pcs
Module quantity per 40' container	728 pcs

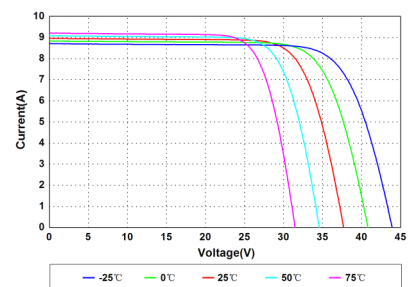
## ENGINEERING DRAWINGS



## IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.

# NEW

From Solax



# SINGLE PHASE INVERTERS

From Solax

[www.solaxpower.com](http://www.solaxpower.com)

## X1 BOOST Dual MPPT

The X1 Boost series are high quality dual MPPT inverter offering efficiency and reliability at an unbeatable cost.

Solax have developed a range of single phase inverters, unrivaled in the industry for their quality, reliability and efficiency. The Solax single phase inverters boast a wide MPPT voltage range to allow for more energy harvesting and have a maximum input voltage of 600V, with a maximum efficiency of 97.8%.



X1-3.0-T    X1-3.3-T  
X1-3.6-T    X1-4.2-T  
X1-4.6-T    X1-5.0-T

Get in touch now:

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DE: +49 7231 4180999

UK: +44 845 6896009

Email: [info@solaxpower.com](mailto:info@solaxpower.com)



# X1 BOOST FROM SOLAX

## SINGLE-PHASE INVERTERS-PRODUCT DATA

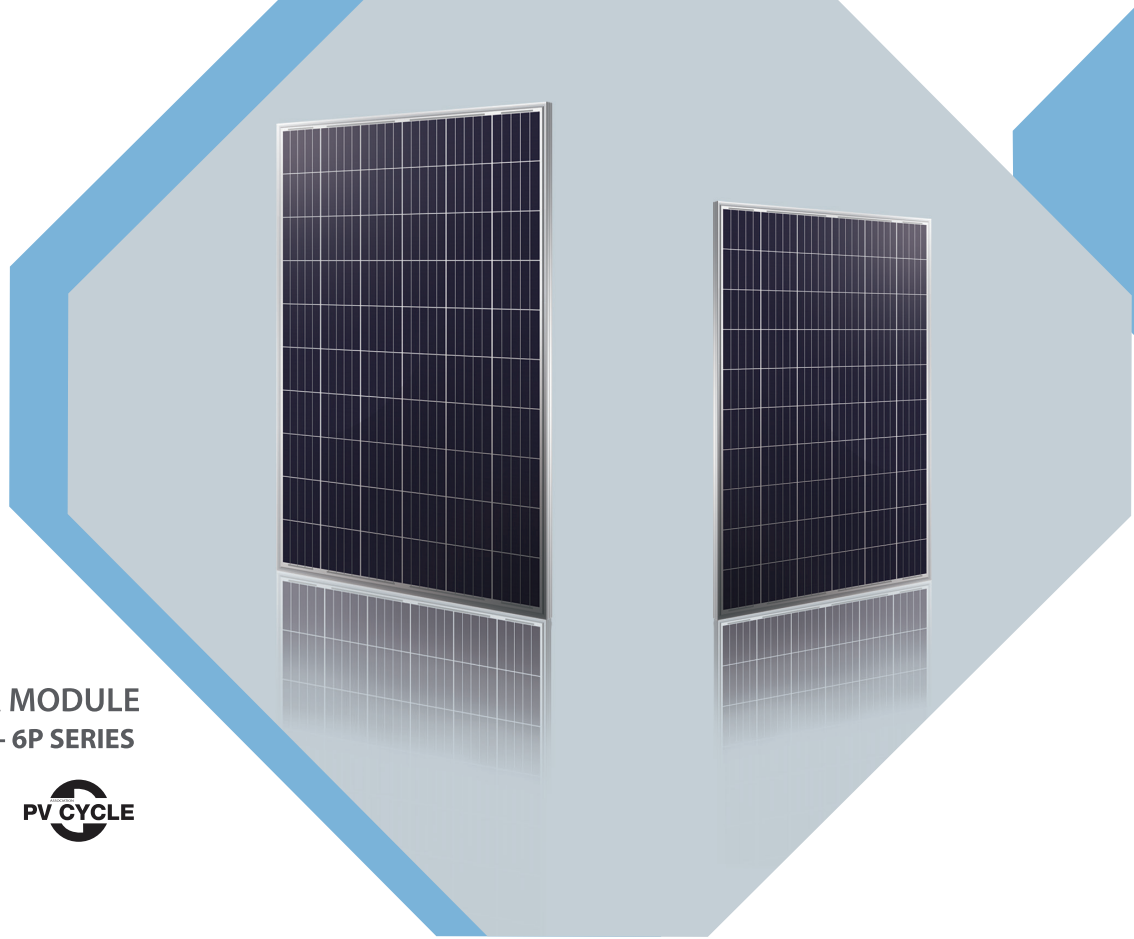


X1-3.0-T      X1-3.3-T      X1-3.6-T      X1-4.2-T      X1-4.6-T      X1-5.0-T

INPUT (DC)						
Max.recommended DC power [W]	3250	3500	4000	4600	5200	5200
Max.DC voltage [V]	600					
Norminal DC operating voltage [V]	360					
Max. input current [A]	12/12	12/12	12/12	12/12	12/12	12/12
Max. short circuit current [A]	15/15	15/15	15/15	15/15	15/15	15/15
MPPT voltage range [V]	125-580	125-580	125-580	125-580	125-580	125-580
MPPT voltage range (full load) [V]	150-550	150-550	160-550	190-550	220-550	220-550
Start input voltage [V]	100	100	100	100	100	110
Start output voltage [V]	150	150	150	150	150	150
Shut down input voltage [V]	70	70	70	70	70	70
No. of MPP trackers	2	2	2	2	2	2
Strings per MPP tracker	1	1	1	1	1	1
OUTPUT (AC)						
Norminal AC power [VA]	3000	3300	3680	4200	4600	4999
Max. apparent AC power [VA]	3000	3300	3680	4200	4600	4999
Rated grid voltage(AC voltage range) [V]	220/230/240(180 to 280 )					
Rated grid Frequency(AC frequency range) [Hz]	50(45 to 55)/60(55 to 65)					
Max. output current [A]	14	15	16	19	21	21
Displacement power factor	0.8 overexcited to 0.8 underexcited					
Total harmonic distortion(THD)	<2%					
EFFICIENCY						
MPPT efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%
Euro-efficiency	97.00%	97.00%	97.00%	97.00%	97.00%	97.00%
Max. efficiency	97.80%	97.80%	97.80%	97.80%	97.80%	97.80%
POWER CONSUMPTION						
Input standby power[W]	<2W					
STANDARD						
Safety	IEC62109-1/-2/AS3100					
EMC	EN61000-1/EN61000-2/EN61000-3					
Cetification	G83/2;G59;AS4777.2-2015;VDE4105; EN50438;CQC;VDE0126					
ENVIRONMENT LIMIT						
Protection class	IP65					
Operating temperature range [°C]	-20..... +60 ( derating at +45 )					
Humidity [°C]	0-95 (non-condensing)					
Altitude [m]	<2000					
Storage temperature [°C]	-20..... +60					
Noise emission(typical) [dB]	<25					
Mounting	Wall hanging					
OTHERS						
Dimensions(WxHxD) [mm]	339x420x143					
Weight [kg]	14.6	14.6	14.6	16.7	16.7	16.7
Cooling concept	Natural					
Topology	Transformerless					
Communication	WIFI(optional), RF(optional), Meter(optional), RS485, USB, DRM					
LCD display	7 LCD					
Button	4(CapSense Button)					
Standard warranty	Standard 5 years					

# 255-275Watt

POLYCRYSTALLINE SOLAR MODULE  
UNIVERSAL SOLAR USG - XXX - 6P SERIES



**ANTI PID**  
Anti P.I.D. Module  
Protection against crystalline performance degradation.  
Passed TÜV SÜD Germany - system voltage durability test



**4 BUSBAR**  
4 BUSBAR Solar Cell  
Superior cell technology with 4 busbars for improved module efficiency



**Up to 16.9%**  
High Module Conversion Efficiency  
Up to 16.9%, through superior cell technology and leading manufacturing capability



**Self Clean**  
Self Clean Effect  
Anti-reflective, hydrophobic layer improves light absorption and reduces surface dust



**Triple EL Tested**  
Triple 100% Electroluminescence (EL) tests minimize breakage rate



**Weak Light**  
Excellent Weak Light Performance  
Excellent performance under low light environments to capture early morning and late evening sunlight



**Intensive Wind and Snow Load Tests**  
Entire module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)\*



**ISO 14001 9001**  
World Class Manufacturing Facilities  
Our manufacturing facilities are ISO certified for Quality assurance and deliver world class products



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

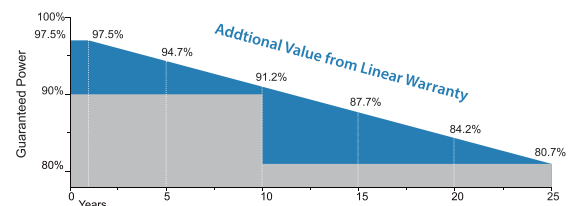


**IP67**  
IP67 Rated Junction Box With 6 Diodes  
IP67 rated junction box with 6 diodes enhancing output & Supports any orientation installation

## Trust USG-XXX-6P Series for Reliable Performance

- World's trusted manufacturer of crystalline silicon photovoltaic module
- 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



**12 YEARS**  
Warranty on Product Material & Workmanship



**25 YEARS**  
Linear Power Output Warranty

# 255-275Watt

## Electrical Characteristics

	USG-255-6P	USG-260-6P	USG-265-6P	USG-270-6P	USG-275-6P	Unit
Rated Power at STC (Pmp)	255	260	265	270	275	W
Power Tolerance	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	W
Maximum Power at STC	255+/-3%	260+/-3%	265+/-3%	270+/-3%	275+/-3%	W
Minimum Module Efficiency ( $\eta_m$ )	15.67	15.98	16.29	16.59	16.90	%
Open Circuit Voltage (Voc)	37.20	37.30	37.40	38.40	38.50	V
Short Circuit Current (Isc)	9.02	9.12	9.22	8.82	8.88	A
Maximum Power Voltage (Vmp)	30.20	30.30	30.40	32.70	33.00	V
Maximum Power Current (Imp)	8.45	8.59	8.73	8.28	8.34	A
Maximum System Voltage	1000(TÜV)					V
Maximum Series Fuse Rating	15					A

STC: Irradiance 1000 W/m<sup>2</sup> module temperature 25°C AM=1.5;

Power measurement tolerance: +/-3%

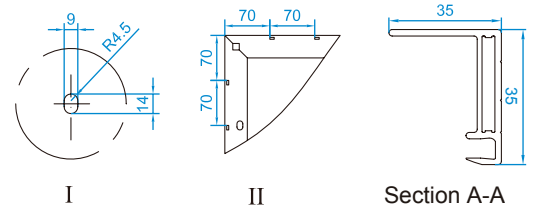
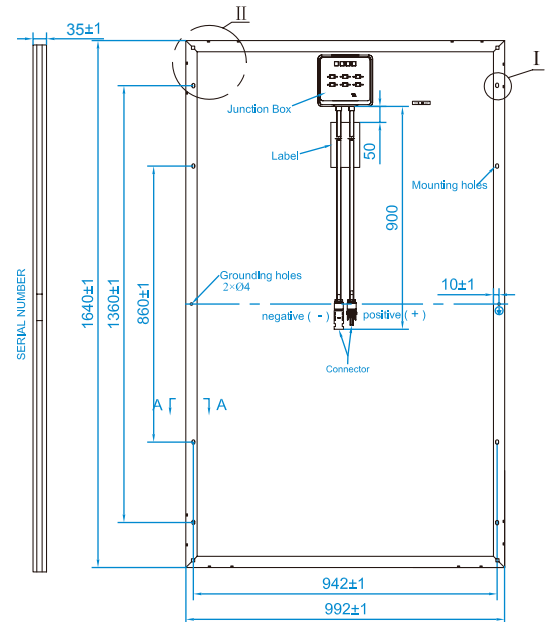
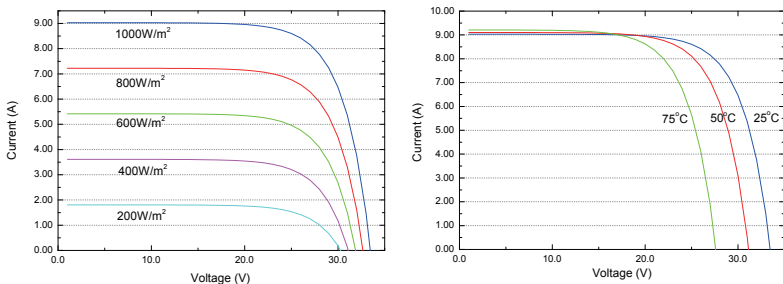
## Temperature Characteristics

Pmax Temperature Coefficient	-0.42%/°C
Voc Temperature Coefficient	-0.32%/°C
Isc Temperature Coefficient	+0.04%/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

## Packing Configuration

Container	20'GP	40'GP	40'HC
Pieces per Pallet	30	30	30/34
Pallets per Container	12	28	28
Pieces per Container	360	840	868

## Current-Voltage & Power-Voltage Curve (USG-260-6P)



\* All Dimensions in mm

\* The above drawing is a graphical representation of the product.

## Mechanical Specifications

External Dimensions	1640 x 992 x 35 mm
Weight	18.5 kg
Solar Cells	Polycrystalline 156 x 156 mm (60pcs)
Front Glass	3.2 mm tempered glass, low iron
Frame	Anodized/ Electrochromic aluminium alloy
Junction Box	IP67
Output Cables	4.0 mm <sup>2</sup> , symmetrical lengths 900 mm
Connector	MC4 Compatible
Mechanical Load	5400 Pa
Hailstone Impact Test	80 km/h for 25 mm ice ball