

ZXP6-LD72 Series

Znshinesolar 5BB Light-Weight Double Glass
Polycrystalline PV Module

325W | 330W | 335W | 340W | 345W | 350W



Excellent cells efficiency

5 busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



Better Weak Illumination Response

More power output in weak light condition, such as haze, cloudy, and morning



Anti PID

Limited power degradation caused by PID effect is guaranteed under strict testing condition for mass production



High wind and snow resistance

■ 5400 Pa snow load

■ 2400 Pa wind load



30 years power warranty

Even after 30 years our solar panel keeps at least 80% of its initial power output

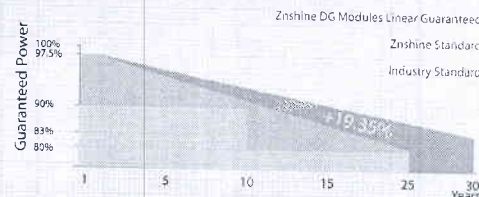
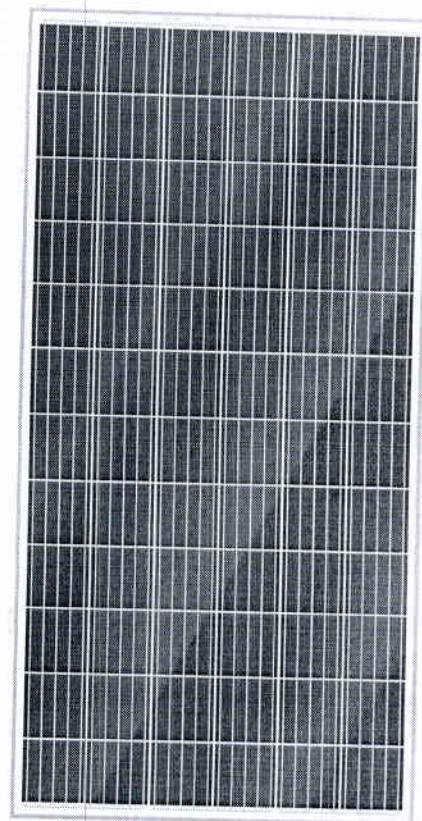


Easy to install

Frame design makes module compatible with all racking and installation methods



ZNSHINESOLAR



12 years product warranty
30 years output warranty



0.5% Annual Degradation
over 30 years



Founded in 1988, Znshine solar is a world's leading high-tech PV module manufacturer. With the state-of-the-art production lines, the company boasts module capacity of 6GW. Bloomberg has listed Znshine as a global Tier 1 PV module maker. Today Znshine has distributed its sales to more than 60 countries around the globe.

www.znshinesolar.com

ELECTRICAL CHARACTERISTICS | STC*

Module Type	ZXP6-LD72 -325/P	ZXP6-LD72 -330/P	ZXP6-LD72 -335/P	ZXP6-LD72 -340/P	ZXP6-LD72 -345/P	ZXP6-LD72 -350/P
Nominal Power Watt Pmax(W)	325	330	335	340	345	350
Power Output Tolerance Pmax(%)	0~+3	0~+3	0~+3	0~+3	0~+3	0~+3
Maximum Power Voltage Vmp(V)	37.2	37.4	37.6	37.8	38.0	38.2
Maximum Power Current Imp(A)	8.74	8.83	8.91	9.00	9.08	9.17
Open Circuit Voltage Voc(V)	46.5	46.7	46.9	47.1	47.3	47.5
Short Circuit Current Isc(A)	9.12	9.16	9.21	9.27	9.34	9.42
Module Efficiency (%)	16.56	16.82	17.07	17.33	17.58	17.84

*STC (Standard Test Condition): Irradiance: 1000W/m², Module Temperature 25°C, AM 1.5

ELECTRICAL CHARACTERISTICS | NMOT*

Maximum Power Pmax(Wp)	240.8	245.0	248.8	253.0	256.8	260.9
Maximum Power Voltage Vmpp(V)	34.9	35.2	35.4	35.7	35.9	36.2
Maximum Power Current Impp(A)	6.91	6.96	7.02	7.08	7.14	7.21
Open Circuit Voltage Voc(V)	42.9	43.1	43.2	43.4	43.6	43.8
Short Circuit Current Isc(A)	7.38	7.42	7.46	7.50	7.56	7.63

*NMOT(Nominal module operating temperature):Irradiance 800W/m², Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Temperature ratings

NMOT	45°C ±3°C
Temperature coefficient of Pmax	-0.40%/°C
Temperature coefficient of Voc	-0.31%/°C
Temperature coefficient of Isc	0.06%/°C

*Do not connect Fuse in Combiner Box with two or more strings in parallel connection

Working conditions

Maximum system voltage	1500 V DC
Operating temperature	-40°C~+85°C
Maximum series fuse	15 A
Maximum load(snow/wind)	5400 Pa / 2400 Pa

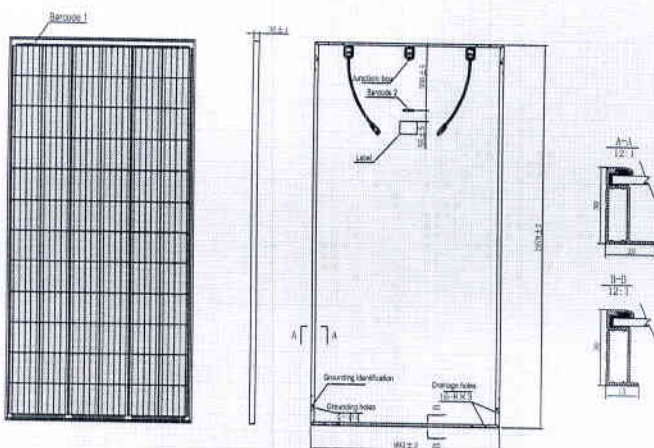
Mechanical data

Solar cells	Poly
Cells orientation	72 (6×12)
Module dimension	1978×992×30 mm(With Frame)
Weight	25.5 kg
Glass	2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass
Junction box	IP 68, 3 diodes
Cables	4 mm ² , 350 mm
Connectors	MC4-compatible

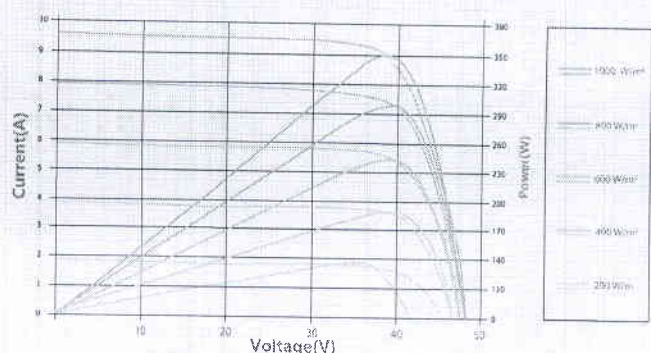
Packaging Configuration

Packing Type	40'HQ
Piece/Box	36
Piece/Container	864

Dimensions(mm)



I-V Curves



Smart Module

255-320 Watt

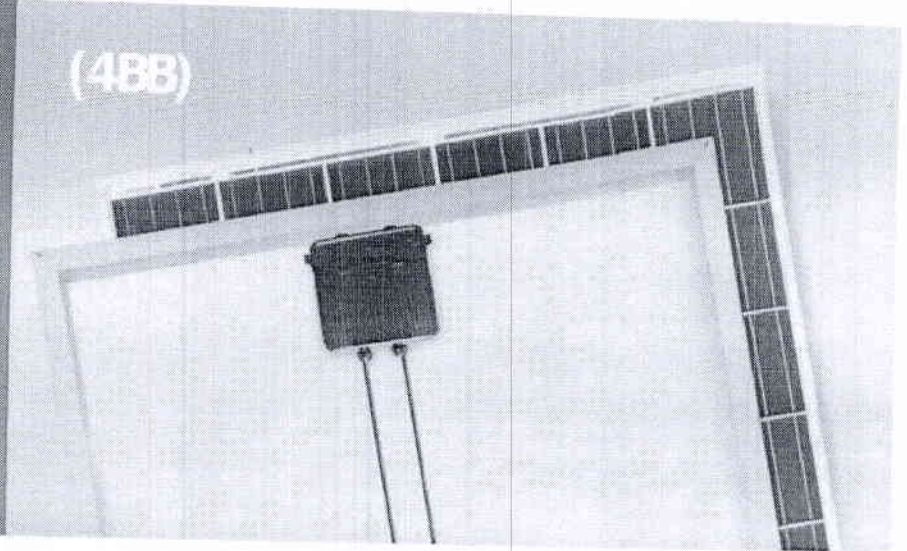
POWER OUTPUT RANGE

Positive power tolerance of 0/+3%

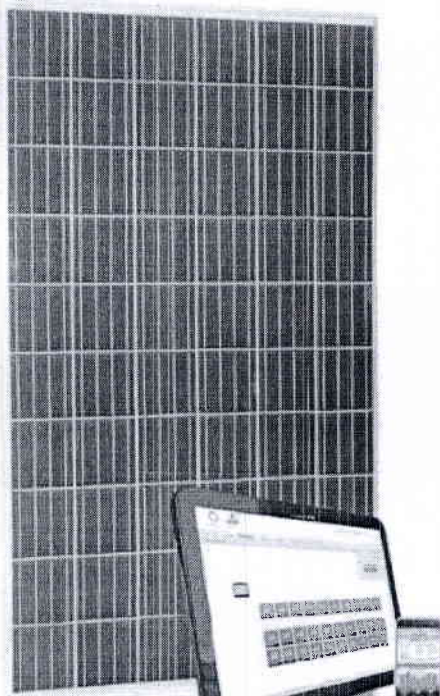
JinkoSolar introduces a brand new line of highly intelligent modules for a wide range of applications.

IEC61215, IEC61730 certified products

(4BB)



Optimized by
solaredge



KEY FEATURES



4 Busbar Solar Cell:

4 busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.



Maximum Power

Integrated optimizer mitigates power loss from panel-to-panel mismatch caused by shading, soiling, aging, and unfavorable roof orientations to ensure maximum power output.



Installation benefits

Provides more installation options for various roofs and orientation limitations.



Hotspot elimination

Hotspots are eliminated and panel degradation is minimized.

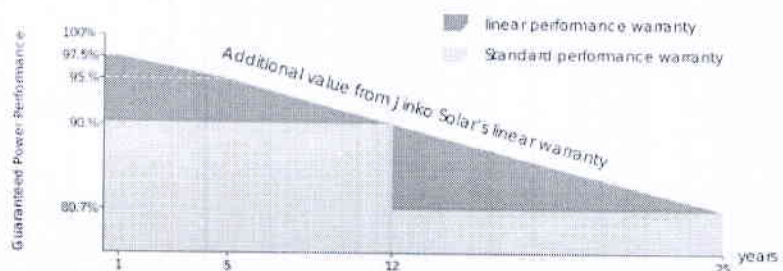


Safety

Module level disconnects provide safety and regulation compliance.

LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty + 25 Year Linear Power Warranty



PRODUCTS

Additional products and services available from SolarEdge:

Single & Three Phase Inverters



2.2kW
3kW
3.5kW
4kW
5kW
6kW



4kW*
5kW
7kW
8kW
9kW
10kW

* Available in Germany, Austria and Denmark for other countries, contact SolarEdge

Commercial & Utility-Scale Inverters



Commercial

5kW 12.5kW
7kW 15kW
8kW 16kW
9kW 17kW
10kW

Monitoring

Monitoring Portal



Monitoring Apps



Safety & Monitoring Interface



Communication & Safety Accessories

WiFi Communication Solution



ZigBee wireless connectivity



Installer Tools

Site Designer



Site Mapper



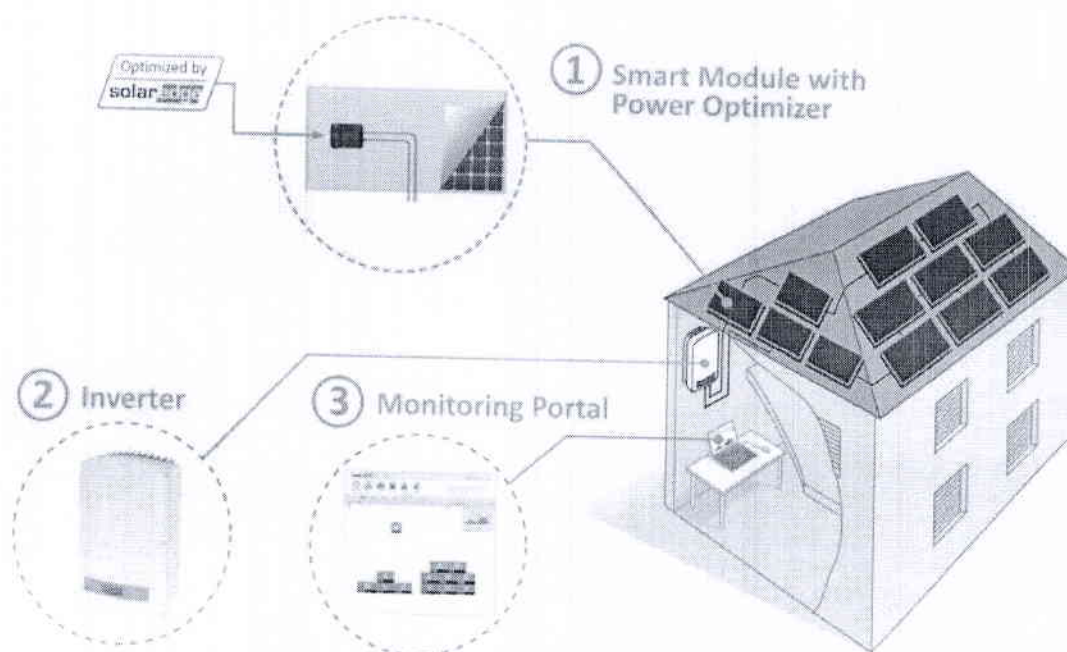
key



Smart Module

Next generation of photovoltaic modules that will revolutionize the solar industry and accelerate the pace toward grid parity.

SYSTEM OVERVIEW

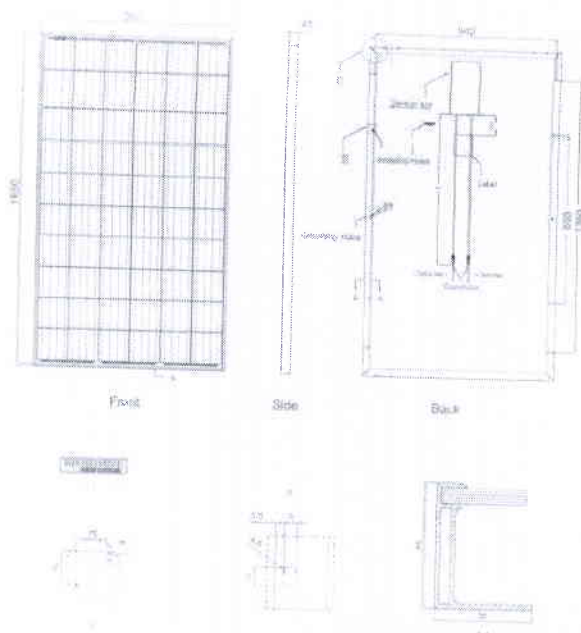


Unique Safety Features

- SafeDC™ allows automatic module DC shutdown when the inverter is not operating or AC is shut down
- Module and inverter thermal shutdown capability
- Electrical arc prevention through SafeDC™



Engineering Drawings



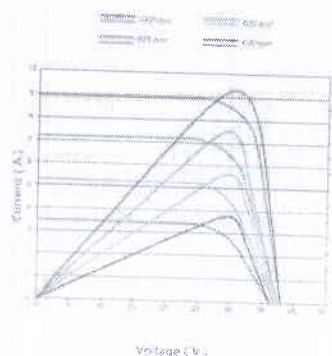
Packaging Configuration

(Two boxes - One pallet)

23pcs/box, 46pcs/pallet, 644 pcs/40' HQ Container

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (250W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}



Mechanical Characteristics

Cell Type	Poly-crystalline 156×156mm (6 inch)
No. of cells	60 (6×10)
Dimensions	1650×992×45mm (65.00×39.05×1.77 inch)
Weight	19.7 kg (43.4 lbs)
Front Glass	3.2mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated (SolarEdge OP1300-LV)
Output Cables	TUV 1×6.0mm ² , Length:1000mm

SPECIFICATIONS

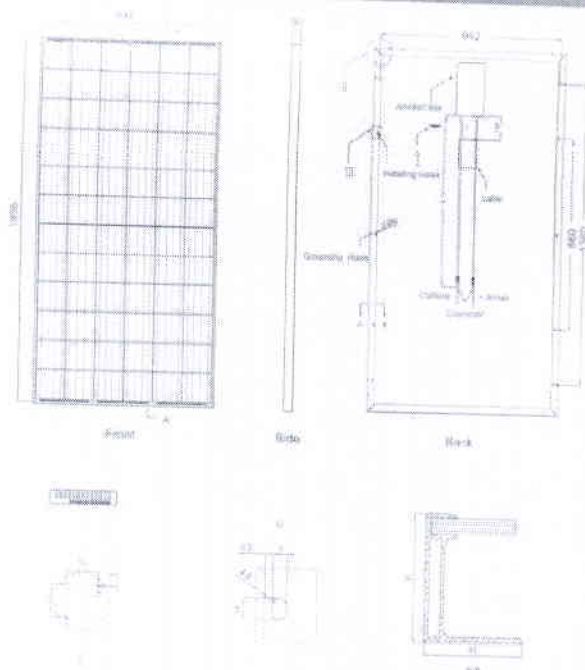
Module Type	JKMS255P		JKMS260P		JKMS265P		JKMS270P	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	255Wp	190Wp	260Wp	194Wp	265Wp	198Wp	270Wp	202Wp
Maximum Power Voltage (Vmp)	30.8V	28.1V	31.1V	28.3V	31.4V	28.7V	31.7V	29.0V
Maximum Power Current (Imp)	8.28A	6.75A	8.37A	6.84A	8.44A	6.91A	8.52A	6.97A
Open-circuit Voltage (Voc)	38.0V	35.0V	38.1V	35.1V	38.6V	35.3V	38.8V	35.8V
Short-circuit Current (Isc)	8.92A	7.22A	8.98A	7.26A	9.03A	7.31A	9.09A	7.35A
Module Efficiency STC (%)	15.56%		15.80%		16.19%		16.50%	
Safe DC™ output Voltage	1V							
Operating Temperature (°C)	-40°C~+85°C							
Maximum system voltage	1000VDC (IEC)							
Maximum series fuse rating	15A							
Power tolerance	0~+3%							
Temperature coefficients of Pmax	-0.40%/°C							
Temperature coefficients of Voc	-0.30%/°C							
Temperature coefficients of Isc	0.06%/°C							
Nominal operating cell temperature (NOCT)	45±2°C							

STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

* Power measurement tolerance: ± 3%

Engineering Drawings



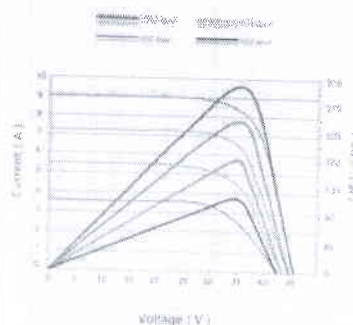
Packaging Configuration

(Two pieces = One pallet)

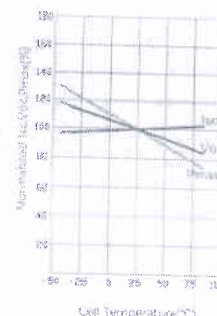
20pcs/box, 40pcs/pallet, 440 pcs/40'HQ Container

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (305W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	Poly-crystalline 156×156mm (6 inch)
No. of cells	72 (6×12)
Dimensions	1956×992×50mm (77.01×39.05×1.97 inch)
Weight	27.7 kg (61.06 lbs.)
Front Glass	4.0mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP67 Rated (SolarEdge OP1300-LV)
Output Cables	TUV 1×6.0mm ² , Length:1000mm

SPECIFICATIONS

Module Type	JKMS305P		JKMS310P		JKMS315P		JKMS320P	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	305Wp	226Wp	310Wp	231Wp	315Wp	235Wp	320Wp	238Wp
Maximum Power Voltage (Vmp)	36.8V	33.6V	37.0V	33.9V	37.2V	34.3V	37.4V	34.7V
Maximum Power Current (Imp)	8.30A	6.72A	8.38A	6.81A	8.48A	6.84A	8.56A	6.88A
Open-circuit Voltage (Voc)	45.8V	42.2V	45.9V	42.7V	46.2V	43.2V	46.4V	43.7V
Short-circuit Current (Isc)	8.81A	7.22A	8.96A	7.26A	9.01A	7.29A	9.05A	7.30A
Module Efficiency STC (%)	16.72%		15.98%		16.23%		16.49%	
Safe DC™ output Voltage	1V							
Operating Temperature(°C)	-40°C~+85°C							
Maximum system voltage	1000VDC (IEC)							
Maximum series fuse rating	15A							
Power tolerance	0~+3%							
Temperature coefficients of Pmax	-0.40%/°C							
Temperature coefficients of Voc	-0.30%/°C							
Temperature coefficients of Isc	0.06%/°C							
Nominal operating cell temperature (NOCT)	45±2°C							

STC: Irradiance 1000W/m² Cell Temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² Ambient Temperature 20°C AM=1.5 Wind Speed 1m/s

* Power measurement tolerance: ± 3%

The company reserves the final right for explanation on any of the information presented hereby. EN-JKMS320P_rev2015

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aus@jinkosolar.com

Logistics Warehouses in Europe & US



www.jinkosolar.com | sales@jinkosolar.com

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KuDymond

HIGH EFFICIENCY POLY MODULE

CS3U-355 | 360 | 365 | 370P-AG

(1000 V / 1500 V)

MORE POWER



Low power loss in cell connection



Low NMOT: 42 ± 3 °C
Low temperature coefficient (Pmax): -0.36 % / °C



Better shading tolerance

MORE RELIABLE



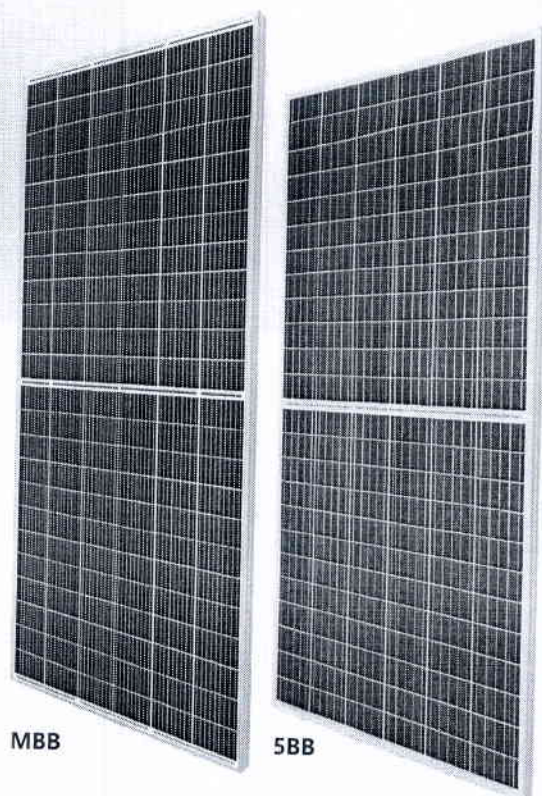
Lower hot spot temperature



Minimizes micro-crack impacts



Heavy snow load up to 8100 Pa,
wind load up to 4000 Pa*



MBB

5BB

*Transparent doubleglass module can be provided upon request.



linear power output warranty*



enhanced product warranty on materials and workmanship*

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES

ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730: VDE / CE / MCS
UL 1703: CSA / IEC 61701 ED2: VDE / IEC 62716: VDE / IEC 60068-2-68: SGS
Take-e-way



* As there are different certification requirements in different markets, please contact your local Canadian Solar sales representative for the specific certificates applicable to the products in the region in which the products are to be used.

CANADIAN SOLAR INC. is committed to providing high quality solar products, solar system solutions and services to customers around the world. No. 1 module supplier for quality and performance / price ratio in IHS Module Customer Insight Survey. As a leading PV project developer and manufacturer of solar modules with over 40 GW deployed around the world since 2001.

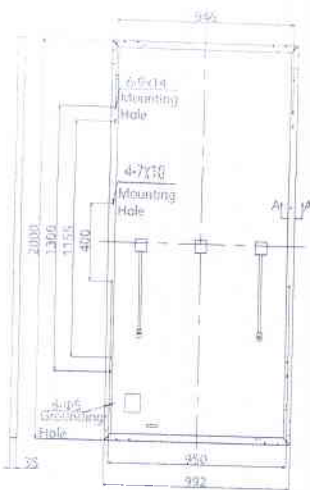
* For detailed information, please refer to the installation Manual.

CANADIAN SOLAR INC.

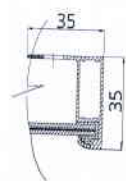
545 Speedvale Avenue West, Guelph, Ontario N1K 1E6, Canada, www.canadiansolar.com, support@canadiansolar.com

ENGINEERING DRAWING (mm)

Rear View



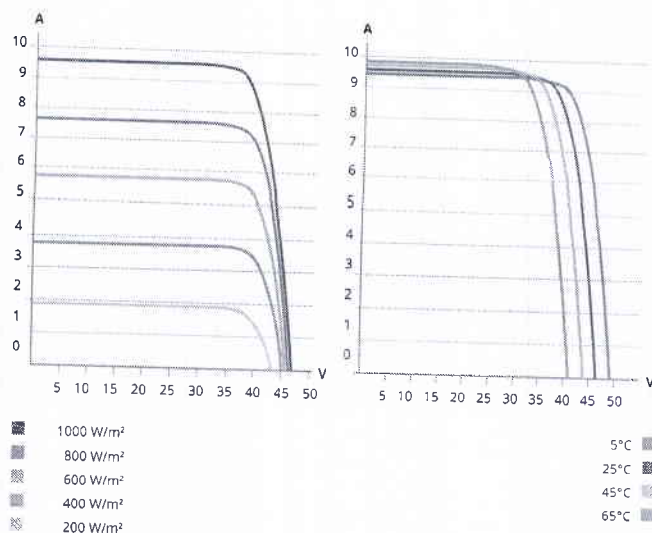
Frame Cross Section A-A



Mounting Hole



CS3U-365P-AG / I-V CURVES



ELECTRICAL DATA | STC*

CS3U	355P-AG	360P-AG	365P-AG	370P-AG
Nominal Max. Power (Pmax)	355 W	360 W	365 W	370 W
Opt. Operating Voltage (Vmp)	39.4 V	39.6 V	39.8 V	40.0 V
Opt. Operating Current (Imp)	9.02 A	9.10 A	9.18 A	9.26 A
Open Circuit Voltage (Voc)	46.8 V	47.0 V	47.2 V	47.4 V
Short Circuit Current (Isc)	9.59 A	9.67 A	9.75 A	9.83 A
Module Efficiency	17.9%	18.2%	18.4%	18.7%
Operating Temperature	-40°C ~ +85°C			
Max. System Voltage	1500V (IEC/UL) or 1000V (IEC/UL)			
Module Fire Performance	TYPE 3 (UL 1703) or Class C (IEC61730)			
Max. Series Fuse Rating	30 A			
Application Classification	Class A			
Power Tolerance	0 ~ + 10 W			

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

ELECTRICAL DATA | NMOT*

CS3U	355P-AG	360P-AG	365P-AG	370P-AG
Nominal Max. Power (Pmax)	264 W	268 W	272 W	276 W
Opt. Operating Voltage (Vmp)	36.7 V	36.9 V	37.0 V	37.2 V
Opt. Operating Current (Imp)	7.21 A	7.27 A	7.34 A	7.40 A
Open Circuit Voltage (Voc)	44.0 V	44.1 V	44.3 V	44.5 V
Short Circuit Current (Isc)	7.74 A	7.80 A	7.87 A	7.93 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m², spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	Poly-crystalline
Cell Arrangement	144 [2X (12 X6)]
Dimensions	2000 X992 X35 mm (78.7 X 39.1 X 1.38 in)
Weight	26.5 kg (58.4 lbs)
Front / Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4 mm² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	Portrait: 400 mm (15.7 in) (+) / 280 mm (11.0 in) (-); landscape: 1250 mm (49.2 in); leap-frog connection: 1670 mm (65.7 in)*
Connector	T4 series or H4 UTX or MC4-EVO2
Per Pallet	30 pieces
Per Container (40' HQ)	660 pieces

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.36 % / °C
Temperature Coefficient (Voc)	-0.28 % / °C
Temperature Coefficient (Isc)	0.05 % / °C
Nominal Module Operating Temperature	42 ± 3°C

PARTNER SECTION

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. Canadian Solar Inc. reserves the right to make necessary adjustments to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

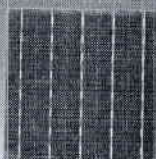
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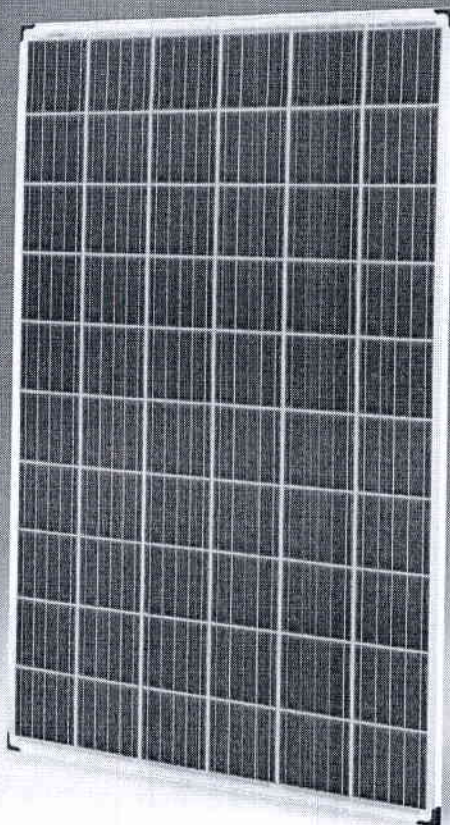


GCL-P6/60GW GCL-P6/60G 双玻系列多晶组件 270-305W

电池片类型



5BB



305W

最高组件功率输出

18.5%

最高组件效率

0~+5W

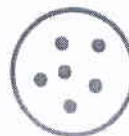
功率公差



优选的封装材料和严格的工艺方案，保证组件抗 PID 能力



高质量硅片保证，高功率组件输出，极佳的性价比优势，是大型电站的理想选择



通过沙尘、盐雾、氨气等耐候性测试，适应严酷的户外环境



采用高透明自清洁钢化玻璃增加光的吸收，有效减少灰尘引起的功率损失



最高可承受 1500V 系统电压，有效减少 BOS 成本

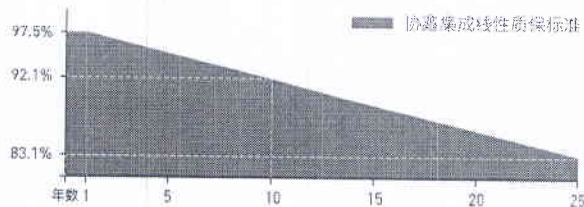


防火等级 A 带来的额外安全性

信赖协鑫长久稳定的品质

- 世界级的晶体硅光伏组件制造商
- 全自动的产线以及领先的光伏技术
- 通过各种长期可靠性测试
- 层压前后分别进行EL测试，有效保证组件可靠性
- 采用严格的国际标准管理体系ISO 9001, ISO14001 和 OHSAS: 18001
- 通过各种严苛的环境测试（盐雾，氨水以及沙暴腐蚀测试IEC61701, IEC 62716, DIN EN 60068-2-68）

线性功率保证



10年产品材料和工艺质保 25年线性功率质保

* 详细信息请参阅手册

由 Swiss Re 提供再保险服务



* 详细信息请联系GCL

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GCL-P6/60GW GCL-P6/60G

双玻系列多晶组件

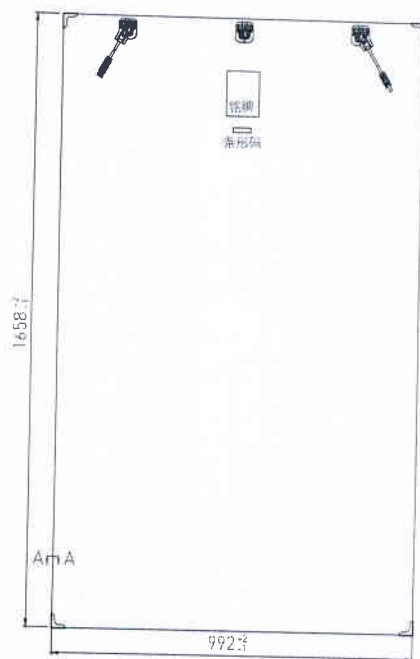
270-305W

电性能参数 | STC

功率输出	Pmax[W]	270	275	280	285	290	295	300	305
最大功率点的工作电压	Vmp[V]	31.20	31.40	31.60	31.80	32.20	32.40	32.60	32.80
最大功率点的工作电流	Imp[A]	8.65	8.76	8.86	8.96	9.01	9.10	9.20	9.30
开路电压	Voc[V]	38.30	38.50	38.70	38.90	39.70	40.00	40.30	40.60
短路电流	Isc[A]	9.29	9.38	9.46	9.54	9.69	9.74	9.79	9.84
组件效率	[%]	16.4	16.7	17.0	17.3	17.6	17.9	18.2	18.5
功率公差	[W]	0~+5							

* 标准测试条件：(大气质量AM1.5, 辐照度1000W/m², 电池温度25°C)下的测量值

组件尺寸



背视图

电性能参数 | NOCT

最大功率	Pmax [W]	201.72	205.16	209.33	212.82	216.65	220.03	223.74	227.49
最大功率点的工作电压	Vmp [V]	28.90	29.10	29.40	29.60	29.80	30.10	30.40	30.70
最大功率点的工作电流	Imp [A]	6.98	7.05	7.12	7.19	7.27	7.31	7.36	7.41
开路电压	Voc [V]	35.70	35.90	36.10	36.30	37.00	37.30	37.60	37.80
短路电流	Isc [A]	7.50	7.57	7.63	7.70	7.82	7.86	7.90	7.94

* NOCT测试条件：辐照度800W/m², 电池温度25°C, 风速1m/s

结构性能

电池片排列	60片 (6×10)
组件尺寸	1658×992×6mm
重量	23.0 kg
正面玻璃	2.5mm高透、减反射镀膜钢化玻璃
背面玻璃	2.5mm浮法钢化玻璃
封装胶膜	高透/白色EVA
接线盒	防护等级 IP68
电缆	4平方毫米, 正极线长225毫米, 负极线长75毫米
二极管数量	3
风压/雪压	2400帕/5400帕*
连接器	MC兼容

* 详细数据请参见GCL-SI安装说明书

温度特性

电池标称工作温度	44±2°C
温度系数 (Isc)	+0.05%/°C
温度系数 (Voc)	-0.30%/°C
温度系数 (Pmax)	-0.39%/°C

极限参数

工作温度	-40~+85°C
最大系统电压	1500V DC
最大保险丝额定电流	20A

可选配置

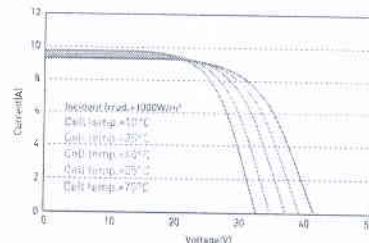
连接器	<input type="checkbox"/> 原装MC
线缆长度	<input type="checkbox"/> 900mm <input type="checkbox"/> 1200mm
特殊要求	<input type="checkbox"/> 边框 <input type="checkbox"/> 挂钩
	<input type="checkbox"/> 透明EVA <input type="checkbox"/> POE

包装方式

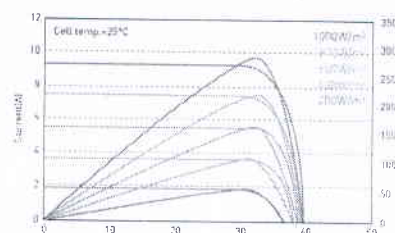
每箱容量	33 片
17.5m平板装车量	1386 片
13.5m平板装车量	924 片

功率测量误差 ±1-3%

不同温度下电流电压曲线 (290W)



不同辐照度下电流电压曲线 / 功率电压曲线 (290W)



注意: 使用产品前请阅读安全与安装说明。
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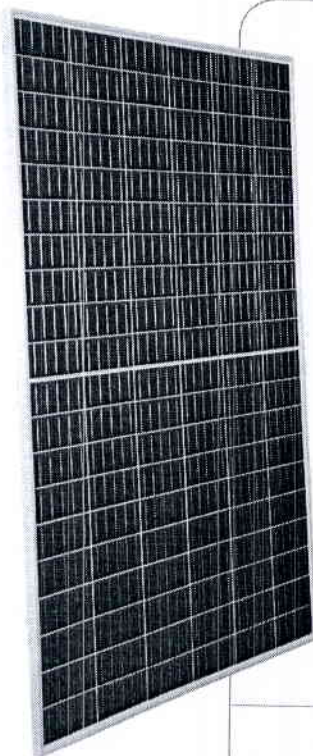
GCL-CN-P6/60G(W)-S-2019-V2.0

HIPro Series

120-CELL HALF CUT POLYCRYSTALLINE
SOLAR MODULE

305-325 Watt

STPXXX - A60/Wfh



Features



High power output

Compared to normal module, the power output can increase 5W-10W



High PID resistant

Advanced cell technology and qualified materials lead to high resistance to PID



Excellent weak light performance

More power output in weak light condition, such as haze, cloudy, and morning



lower hot spots

Reduce the hot spots and minimize panel degradation



Extended load tests

Module certified to withstand front side maximum static test load (5400 Pascal) and rear side maximum static test loads (3800 Pascal) *



Withstanding harsh environment

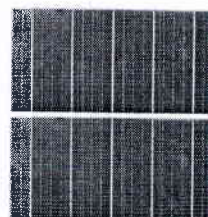
Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline

Certifications and standards:
IEC 61215, IEC 61730, conformity to CE



Trust Suntech to Deliver Reliable Performance Over Time

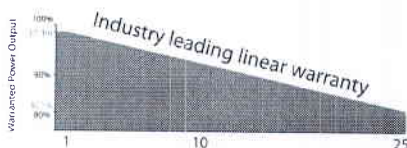
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivalled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001: 2008, ISO 14001: 2004 and ISO17025: 2005
- Regular independently checked production process from international accredited institute/company
- Tested for harsh environments (salt mist, ammonia corrosion and sand blowing testing: IEC 61701, IEC 62716, DIN EN 60068-2-68)***
- Long-term reliability tests
- 2 x 100% EL inspection ensuring defect-free



Special Cell Design

The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.

Industry-leading Warranty based on nominal power



- 97.5% in the first year, thereafter, for years two (2) through twenty-five (25), 0.7% maximum decrease from MODULE's nominal power output per year, ending with the 80.7% in the 25th year after the defined WARRANTY STARTING DATE.****
- 12-year product warranty
- 25-year linear performance warranty



IP68 Rated Junction Box

The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

* Please refer to Suntech Standard Module Installation Manual for details. **WEEE only for EU market.

*** Please refer to Suntech Product Near-coast Installation Manual for details. **** Please refer to Suntech Product Warranty for details.

Electrical Characteristics

STC	STPXXX-A60/Wth				
Maximum Power at STC (Pmax)	325 W	320 W	315 W	310 W	305 W
Optimum Operating Voltage (Vmp)	33.5 V	33.3 V	33.1 V	32.9 V	32.7 V
Optimum Operating Current (Imp)	9.71 A	9.61 A	9.52 A	9.43 A	9.33 A
Open Circuit Voltage (Voc)	40.2 V	40.0 V	39.8 V	39.6 V	39.4 V
Short Circuit Current (Isc)	10.13 A	10.03 A	9.94 A	9.85 A	9.75 A
Module Efficiency	19.3%	19.0%	18.7%	18.4%	18.1%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1000/1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5 W				

STC: Irradiance 1000 W/m², module temperature 25 °C, AM=1.5;
Tolerance of Pmax is within +/- 3% and tolerances of Voc and Isc are within +/- 5%.

NMOT	STPXXX-A60/Wth				
Maximum Power at NMOT (Pmax)	243.9 W	240.0 W	236.4 W	232.7 W	228.9 W
Optimum Operating Voltage (Vmp)	31.4 V	31.2 V	31.0 V	30.8 V	30.6 V
Optimum Operating Current (Imp)	7.77 A	7.69 A	7.62 A	7.55 A	7.47 A
Open Circuit Voltage (Voc)	37.7 V	37.5 V	37.3 V	37.1 V	36.9 V
Short Circuit Current (Isc)	8.17 A	8.09 A	8.02 A	7.94 A	7.86 A

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.38%/°C
Temperature Coefficient of Voc	-0.321%/°C
Temperature Coefficient of Isc	0.050%/°C

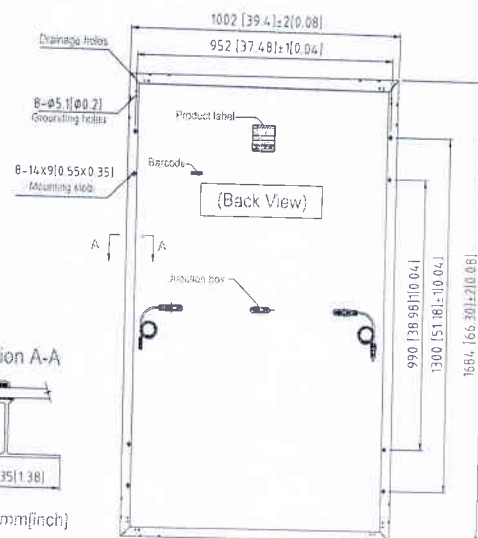
Mechanical Characteristics

Solar Cell	Polycrystalline silicon 158.75 mm
No. of Cells	120 (6 × 20)
Dimensions	1684 × 1002 × 35 mm (66.3 × 39.4 × 1.4 inches)
Weight	19.0 kgs (41.9 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm ² , Portrait: (-)350 mm and (+)160 mm in length Landscape: (-)1200 mm and (+)1200 mm in length or customized length
Connectors	1000 V: MC4 compatible 1500 V: MC4 EVO2, Cable 015

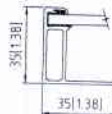
Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	31	31
Pallets per container	6	26
Pieces per container	186	806
Packaging box dimensions	1736 × 1130 × 1166 mm	
Packaging box weight	625 kg	

Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.

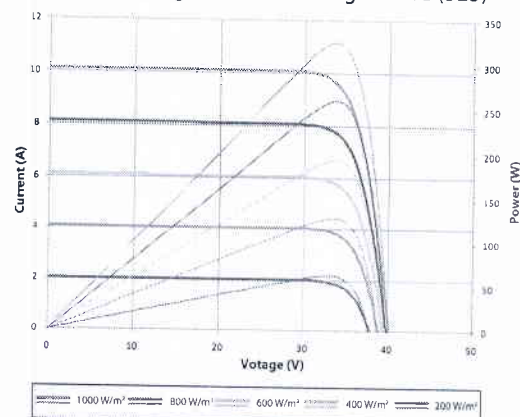


Section A-A



Note: mm [inch]

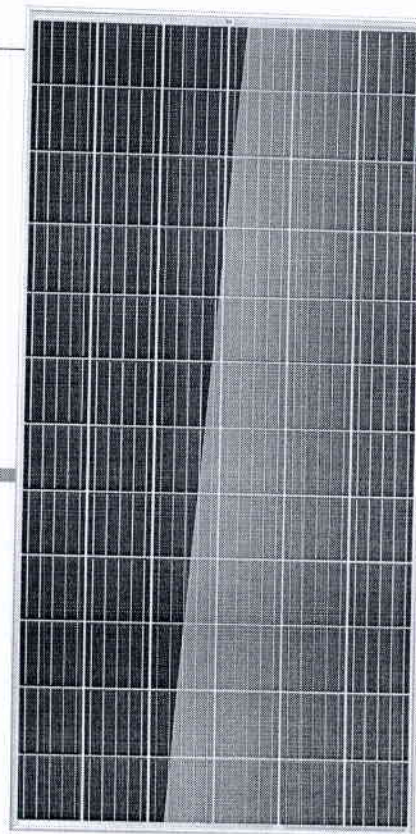
Current-Voltage & Power-Voltage Curve (325)



Dealer information

THE TALLMAX

FRAMED 72-CELL MODULE



72 CELL
MULTICRYSTALLINE MODULE

320-335W
POWER OUTPUT RANGE

17.3%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading comprehensive solutions provider for solar energy. We believe close cooperation with our partners is critical to success. Trina Solar now distributes its PV products to over 60 countries all over the world. Trina is able to provide exceptional service to each customer in each market and supplement our innovative, reliable products with the backing of Trina as a strong, bankable partner. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

Comprehensive Products And System Certificates

IEC61215/IEC61730/UL1703/IEC61701/IEC62716
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 14064: Greenhouse gases Emissions Verification
OHSAS 18001: Occupation Health and Safety Management System



Ideal for large scale installations

- High powerful footprint reduces installation time and BOS costs
- 1000V UL/1000V IEC certified



One of the industry's most trusted modules

- Field proven performance
- Strong, reliable supplier



Highly reliable due to stringent quality control

- Over 30 in-house tests (UV, TC, HF, and many more)
- In-house testing goes well beyond certification requirements
- PID resistant
- 100% EL double inspection

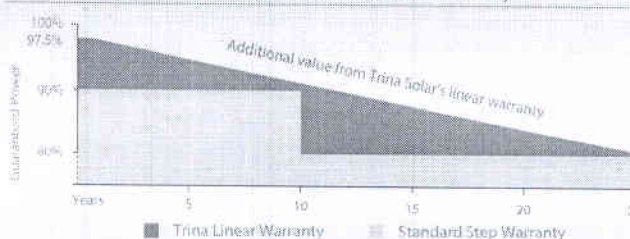


Certified to withstand the most challenging environmental conditions

- 2400 Pa wind load
- 5400 Pa snow load
- 35 mm hail stones at 97 km/h

LINEAR PERFORMANCE WARRANTY

10 Year Product Warranty - 25 Year Linear Power Warranty



PRODUCTS

TSM-PD14

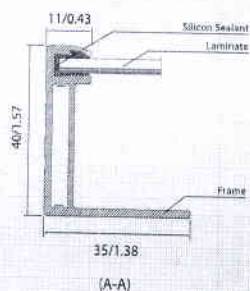
POWER RANGE

320-335W

DIMENSIONS OF PV MODULE (mm/inch)

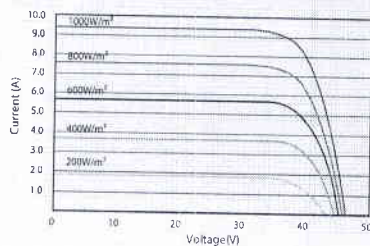


Back View

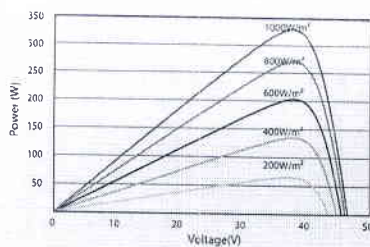


(A-A)

I-V CURVES OF PV MODULE(335W)



P-V CURVES OF PV MODULE(335W)



ELECTRICAL DATA (STC)

Peak Power Watts- P_{MAX} (Wp)*	320	325	330	335
Power Output Tolerance- P_{MAX} (W)	0 ~ +5			
Maximum Power Voltage- V_{MP} (V)	37.1	37.2	37.3	37.6
Maximum Power Current- I_{MP} (A)	8.63	8.76	8.87	8.91
Open Circuit Voltage- V_{OC} (V)	45.8	45.9	46.1	46.3
Short Circuit Current- I_{SC} (A)	9.10	9.25	9.38	9.39
Module Efficiency η (%)	16.5	16.8	17.0	17.3

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5
*Measuring tolerance: $\pm 3\%$.

ELECTRICAL DATA (NOCT)

Maximum Power- P_{MAX} (Wp)	238	242	246	249
Maximum Power Voltage- V_{MP} (V)	34.4	34.5	34.6	34.9
Maximum Power Current- I_{MP} (A)	6.91	7.02	7.11	7.14
Open Circuit Voltage- V_{OC} (V)	42.5	42.6	42.7	42.9
Short Circuit Current- I_{SC} (A)	7.35	7.47	7.57	7.58

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s

MECHANICAL DATA

Solar Cells	Multicrystalline 156.75 × 156.75 mm (6 inches)
Cell Orientation	72 cells (6 × 12)
Module Dimensions	1956 × 992 × 40 mm (77.0 × 39.1 × 1.57 inches)
Weight	22.5 kg (49.6 lb)
Glass	3.2 mm (0.13 inches), High Transmission, AR Coated Tempered Glass
Backsheet	White
Frame	Silver Anodized Aluminium Alloy
J-Box	IP 67 or IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm ² (0.006 inches ²), 1200 mm (47.2 inches)
Connector	MC4 or Amphenol H4/UTX
Fire Type	Type 1 or Type 2

TEMPERATURE RATINGS

NOCT(Nominal Operating Cell Temperature)	44°C ($\pm 2^\circ\text{C}$)
Temperature Coefficient of P_{MAX}	-0.41%/°C
Temperature Coefficient of V_{OC}	-0.32%/°C
Temperature Coefficient of I_{SC}	0.05%/°C

MAXIMUM RATINGS

Operational Temperature	-40 ~ +85°C
Maximum System Voltage	1000V DC (IEC) 1000V DC (UL)
Max Series Fuse Rating	15A

(DO NOT connect Fuse In Combiner Box with two or more strings in parallel connection)

WARRANTY

10 year Product Workmanship Warranty

25 year Linear Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 27 pieces

Modules per 40' container: 648 pieces