

## ABOUT PHONO SOLAR

Phono Solar Technology Co., Ltd. is one of the world's leading renewable energy product manufacturers and a well trusted brand provider. The Phono Solar brand has become synonymous with high performing, top quality photovoltaic panels that are ideal for use in large scale power plants, commercial and residential installations.

17%

Up to 17% module efficiency

PID

A+ class in PI Berlin test



Outstanding performance in weak-light conditions

IP68

IP68 connectors enhance the reliability of the PV system



Excellent temperature coefficient giving higher yields in the long term

5400Pa

Certified to withstand increased loads of up to 5400Pa



Positive current sorting

25 YEAR

10-year product warranty\*  
25-year performance warranty\*

Durability assured:



Salt mist corrosion certification



Ammonia corrosion certification



Fire test certification

- Manufacturing facility certified by ISO 9001, ISO 14001 and OHSAS 18001
- Internal quality control has standards higher than both IEC and UL

- Product quality is assured through the use of branded components
- Free module recycling through PV Cycle Association membership\*\*

HIGH PERFORMANCE  
SOLAR MODULES

290W-315W

Diamond Series

PID

\* IN COMPLIANCE WITH OUR WARRANTY TERMS AND CONDITIONS.  
\*\* IN PV CYCLE MEMBER COUNTRIES ONLY, SEE: WWW.PVCYCLE.COM



## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Polycrystalline 156mm x 156mm square, 6 x 12 pieces in series
<b>Dimension</b>	Length: 1956mm (77.0 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
<b>Weight</b>	23kg (50.7lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	4mm <sup>2</sup> (IEC) / 12AWG(UL), 1100mm
<b>Junction Box</b>	IP 67 rated

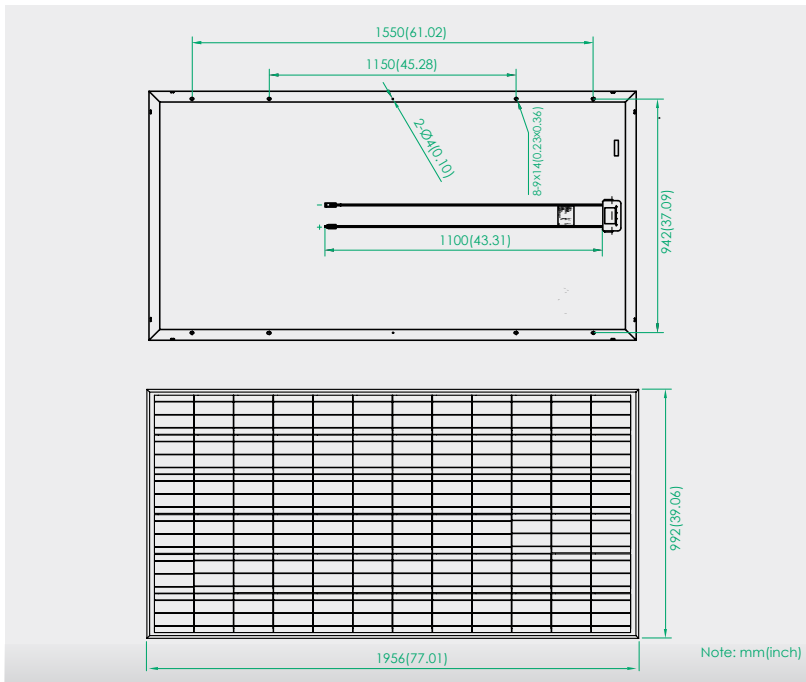
## ABSOLUTE MAXIMUM RATING

Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
Maximum Series Fuse Rating	15A
IEC Application Class (IEC61730)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	DC 1000V(IEC)
	DC 600V(UL)/1000V(ETL)

## ELECTRICAL TYPICAL VALUES<sup>1,2</sup>

Model	Rated Power (P <sub>mpp</sub> )	Rated Current (I <sub>mpp</sub> )	Rated Voltage (V <sub>mpp</sub> )	Short Circuit Current (I <sub>sc</sub> )	Open Circuit Voltage (V <sub>oc</sub> )	Module Efficiency (%)
PS290P-24/T	290W	8.03	36.1	8.50	45.2	14.95
PS295P-24/T	295W	8.14	36.2	8.58	45.4	15.20
PS300P-24/T	300W	8.24	36.4	8.65	45.6	15.46
PS305P-24/T	305W	8.35	36.5	8.73	45.8	15.72
PS310P-24/T	310W	8.45	36.7	8.80	46.0	15.98
PS315P-24/T	315W	8.56	36.8	8.88	46.2	16.23

## DIMENSIONS



## TEMPERATURE CHARACTERISTICS

NOCT (Nominal Operation Cell Temperature)	45°C ± 2°C
Voltage Temperature Coefficient	-0.31%/K
Current Temperature Coefficient	+0.07%/K
Power Temperature Coefficient	-0.40%/K

## WEAK LIGHT PERFORMANCE

Intensity [W/m <sup>2</sup> ]	I <sub>mpp</sub>	V <sub>mpp</sub>
1000	1.0	1.000
800	0.8	0.996
600	0.6	0.990
400	0.4	0.983
200	0.2	0.952

## PACKING CONFIGURATION

Container	40' HQ
Pieces per pallet	24
Pallets per container	22
Pieces per container	528

Note: This datasheet is not legally binding. Phono Solar reserves the right to make specifications changes without notice. Further information can be found on our website: [www.phonosolar.com](http://www.phonosolar.com)

- Defined as standard deviation of thousands measurements. Absolute power values depend on the measuring system. They can differ by +/-5% from one measuring system to another.
- Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m<sup>2</sup>, Air mass 1.5 Spectrum, cell temperature of 25°C.

## PARTNER INFORMATION



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

