

## 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.



Outstanding performance in weak-light conditions



Anti-PID<sup>[1]</sup>



Excellent temperature coefficient giving higher yields in the long term



IP68 connectors enhance the reliability of the PV system



Positive current sorting



Certified to withstand increased loads of up to 5400Pa



10-year product warranty  
25-year performance warranty<sup>[2]</sup>

Durability assured:



Salt mist corrosion resistance



Ammonia corrosion resistance



Fire test resistance



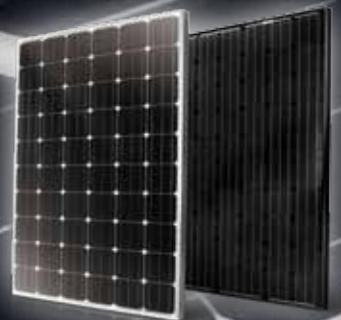
Blowing sand resistance

- 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<sup>[3]</sup>

## HIGH PERFORMANCE SOLAR MODULES

# 255W-280W



Diamond Series

Onyx Series



## MECHANICAL CHARACTERISTICS

<b>Solar Cells</b>	Monocrystalline 156mm x 156mm square, 6 × 10 pieces in series
<b>Dimension</b>	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
<b>Weight</b>	19kg (41.9lbs)
<b>Front Glass</b>	3.2mm toughened glass
<b>Frame</b>	Anodized aluminium alloy
<b>Cable</b>	4mm <sup>2</sup> (IEC) / 12AWG(UL), 900mm
<b>Junction Box</b>	IP 67 rated

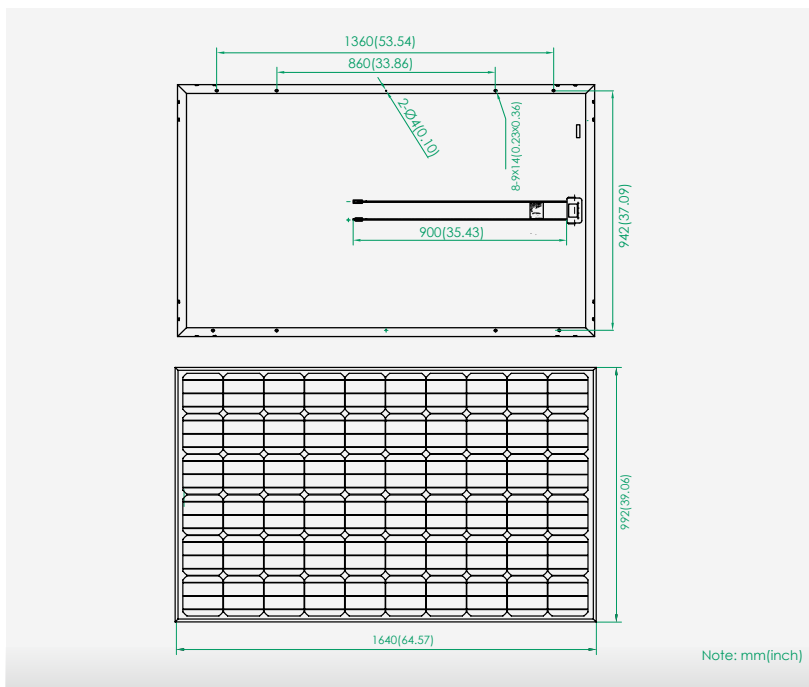
## ABSOLUTE MAXIMUM RATING

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 (IEC61730)	C
Module Fire Performance (UL1703)	Type 1
Maximum System Voltage	DC 1000V(IEC)
	DC 600V(UL)/1000V(ETL)

## ELECTRICAL TYPICAL VALUES<sup>[4]</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 (%)
PS255M-20/U	255W	8.35A	30.6V	8.75A	38.0V	15.67
PS260M-20/U	260W	8.46A	30.8V	8.85A	38.1V	15.98
PS265M-20/U	265W	8.55A	31.0V	8.95A	38.2V	16.29
PS270M-20/U	270W	8.65A	31.2V	9.05A	38.3V	16.60
PS275M-20/U	275W	8.75A	31.4V	9.10A	38.4V	16.90
PS280M-20/U	280W	8.86A	31.6V	9.15A	38.5V	17.20

## DIMENSIONS



## TEMPERATURE CHARACTERISTICS

<b>NOCT (Nominal Operation Cell Temperature)</b>	45°C ± 2°C
<b>Voltage Temperature Coefficient</b>	-0.33%/K
<b>Current Temperature Coefficient</b>	+0.06%/K
<b>Power Temperature Coefficient</b>	-0.43%/K

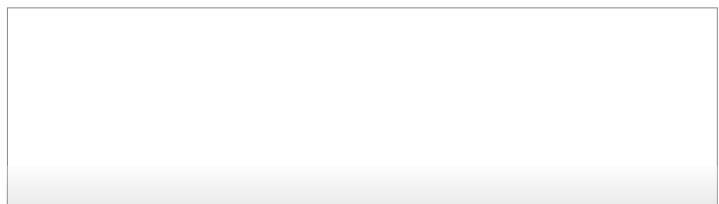
## WEAK LIGHT PERFORMANCE

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

<b>Container</b>	40' HQ	20' HQ
<b>Pieces per container</b>	728	264

## PARTNER INFORMATION



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)

1. Anti-PID modules are only available upon request.
2. In compliance with our warranty terms and conditions.
3. In PV Cycle member countries only, see: [www.pvcycle.org](http://www.pvcycle.org)
4. 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.