

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

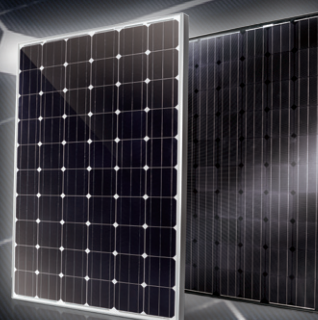
- Manufacturing facility certified by ISO 9001, ISO 14001 and OHSAS 18001
- Internal quality control has standards higher than both IEC and UL

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

HIGH PERFORMANCE SOLAR MODULES

235W-270W

MONO



Diamond Series

Onyx Series

* IN COMPLIANCE WITH OUR WARRANTY TERMS AND CONDITIONS.

** IN PV CYCLE MEMBER COUNTRIES ONLY, SEE: WWW.PVCYCLE.COM



MECHANICAL CHARACTERISTICS

Solar Cells	Monocrystalline 156mm x 156mm square, 6 × 10 pieces in series
Dimension	Length: 1640mm (64.6 inch)
	Width: 992mm (39.1 inch)
	Height: 40mm (1.6 inch)
Weight	19kg (41.9lbs)
Front Glass	3.2mm toughened glass
Frame	Anodized aluminium alloy
Cable	0.90m wire (ø4mm ²)
Junction Box	IP 67 rated

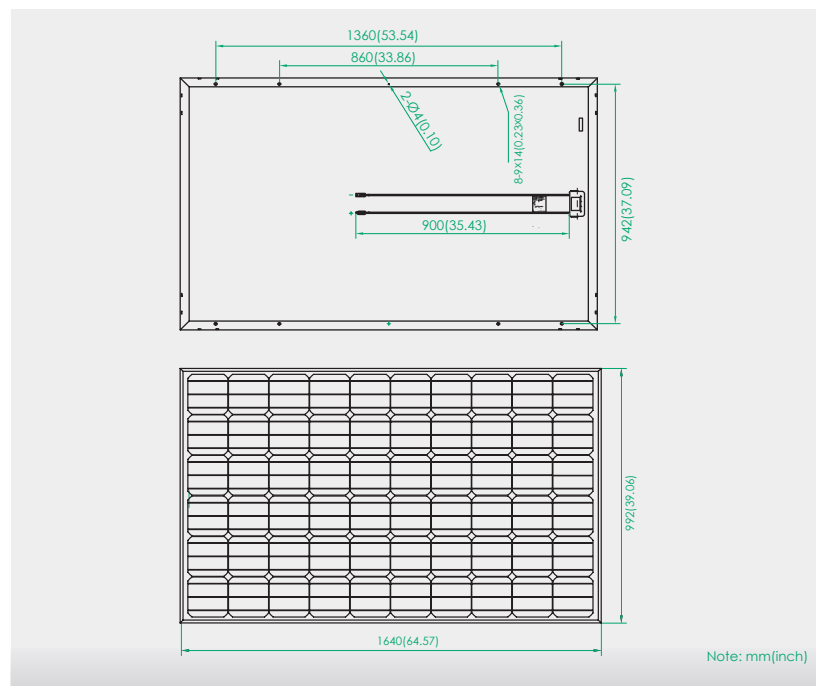
ABSOLUTE MAXIMUM RATING

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 (IEC 61215)	A
Fire Rating (UL 1703)	C
Maximum System Voltage	1000V DC (IEC 61215)
	1000V DC (UL 1703)

ELECTRICAL TYPICAL VALUES^{1,2}

Model	Rated Power (P _{mpp})	Tolerance	Rated Current (I _{mpp})	Rated Voltage (V _{mpp})	Short Circuit Current (I _{sc})	Open Circuit Voltage (V _{oc})	Module Efficiency (%)
PS235M-20/U	235W	0~+5W	7.90A	29.8V	8.35A	37.5V	14.44
PS240M-20/U	240W	0~+5W	8.00A	30.0V	8.45A	37.6V	14.75
PS245M-20/U	245W	0~+5W	8.13A	30.2V	8.55A	37.8V	15.06
PS250M-20/U	250W	0~+5W	8.24A	30.4V	8.65A	37.9V	15.37
PS255M-20/U	255W	0~+5W	8.35A	30.6V	8.75A	38.0V	15.67
PS260M-20/U	260W	0~+5W	8.46A	30.8V	8.85A	38.1V	15.98
PS265M-20/U	265W	0~+5W	8.55A	31.0V	8.95A	38.2V	16.29
PS270M-20/U	270W	0~+5W	8.65A	31.2V	9.05A	38.3V	16.60

DIMENSIONS



TEMPERATURE CHARACTERISTICS

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

WEAK LIGHT PERFORMANCE

Intensity [W/m ²]	I _{mpp}	V _{mpp}
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	28
Pieces per container	672

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

- 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/m², Air mass 1.5 Spectrum, cell temperature of 25°C.