# Phono® Solar

SHARE THE SUN, POWER THE FUTURE!

POLY MONO

## 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
- PID — Anti-PID [1]
- Excellent temperature coefficient giving higher yields in the long term
- IP68 — IP68 connectors enhance the reliability of the PV system
- Positive current sorting
- 5400PA — Certified to withstand increased loads of up to 5400Pa
- 25 YEAR — 10-year product warranty
  25-year performance warranty[2]

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[3]

## HIGH PERFORMANCE SOLAR MODULES

# 250W-270W



Diamond Series

Onyx Series

CE TÜV CEC Clean Energy Council PV CYCLE

国机集团 SINOMACH | SUMEC 苏美达集团

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# SOLAR MODULES 250W-270W

Phono® Solar

## MECHANICAL CHARACTERISTICS

| | |
|---|---|
| Solar Cells | Polycrystalline 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) (Current stock is 35mm) |
| Weight | 19kg (41.9lbs) |
| Front Glass | 3.2mm toughened glass |
| Frame | Anodized aluminium alloy |
| Cable | 4mm$^2$(IEC) / 12AWG(UL), 900mm |
| Junction Box | IP 67 rated |

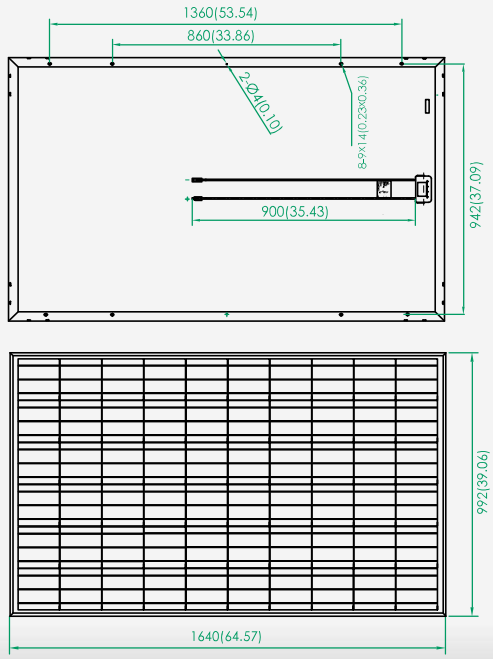
## ABSOLUTE MAXIMUM RATING

| Parameter | Values |
|---|---|
| Operating Temperature | From -40 to +85℃ |
| 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[4]

| Model | Rated Power ($P_{mpp}$) | Rated Current ($I_{mpp}$) | Rated Voltage ($V_{mpp}$) | Short Circuit Current ($I_{sc}$) | Open Circuit Voltage ($V_{oc}$) | Module Efficiency (%) |
|---|---|---|---|---|---|---|
| PS250P-20/U | 250W | 8.30A | 30.2V | 8.70A | 37.8V | 15.37 |
| PS255P-20/U | 255W | 8.42A | 30.4V | 8.80A | 37.9V | 15.67 |
| PS260P-20/U | 260W | 8.53A | 30.6V | 8.90A | 38.0V | 15.98 |
| PS265P-20/U | 265W | 8.61A | 30.8V | 9.00A | 38.1V | 16.29 |
| PS270P-20/U | 270W | 8.71A | 31.0V | 9.10A | 38.2V | 16.60 |

## DIMENSIONS




## TEMPERATURE CHARACTERISTICS

| | |
|---|---|
| NOCT (Nominal Operation Cell Temperature) | 45℃ ± 2℃ |
| Voltage Temperature Coefficient | -0.31%/K |
| Current Temperature Coefficient | +0.07%/K |
| Power Temperature Coefficient | -0.40%/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 | 20' HQ |
|---|---|---|
| Pieces per container | 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

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
4. Measurement conditions under irradiance level of Standard Test Conditions(STC): 1000W/m$^2$, Air mass 1.5 Spectrum, cell temperature of 25°C.