

For a Free Quote:

Web: EnergyPal.com/solar

Call: 1-800-990-3725

Email: contact@energypal.com

EnergyPal

Solar Panel Guide Specification Data Sheet

**Phono Solar Technology Co., Ltd.
Smart Mono/300-310
PS300M-20/U**

Also available on the web at
EnergyPal.com/phono-solar-technology-co-ltd-solar-panels/ps300m-20-u

Phono[®] Solar

Smart Module

solaredge
architects of energy™

Mono/300-310W

25%

Up to 25% More Energy

Increased energy yield & faster return on investment through module-level MPPT



Cost Efficient Maintenance

Full visibility of system performance & remote troubleshooting



Constraint Free Design

Maximum space utilization with minimum design time



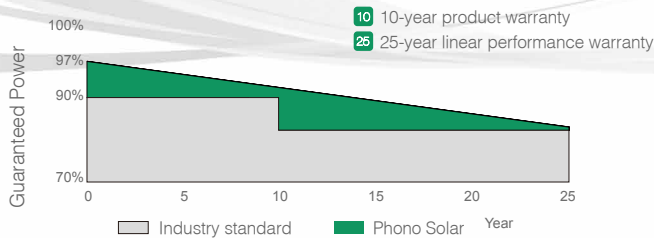
Safety Guaranty

Safety during installation, maintenance, firefighting & other emergencies

Bloomberg Tier1
NEW ENERGY FINANCE



TOP PERFORMER



Certificate No.: BABT 8632



EN EN-20180815

SINOMACH | SUMEC
SUMEC GROUP CORPORATION

ELECTRICAL TYPICAL VALUES

| Model | PS300M-20/U | PS305M-20/U | PS310M-20/U |
|---|---|-------------|-------------|
| Type | Monocrystalline 6 inch x 6 inch square, 6 × 10 pieces in series | | |
| Rated Power (Pmpp) | 300W | 305W | 310W |
| Tolerance | 0~+5w | | |
| Rated Current (Impp) | 9.32 | 9.43 | 9.54 |
| Rated Voltage (Vmpp) | 32.19 | 32.35 | 32.50 |
| Short Circuit Current (Isc) | 9.82 | 9.87 | 9.92 |
| Open Circuit Voltage (Voc) | 39.90 | 40.00 | 40.10 |
| Module Efficiency (%) | 18.44 | 18.75 | 19.04 |
| NOCT (Nominal Operation Cell Temperature) | 45±2°C | | |
| Voltage Temperature Coefficient | -0.35%/°C | | |
| Current Temperature Coefficient | +0.07%/°C | | |
| Power Temperature Coefficient | -0.45%/°C | | |

MECHANICAL CHARACTERISTICS

| | |
|----------------------|--|
| | Length: 1640mm (64.57 inch) |
| Dimension (L× W × H) | Width: 992mm (39.06 inch) |
| | Height: 35mm (1.38 inch) |
| Weight | 18kg (39.68 lbs) |
| Front Glass | 3.2mm toughened glass |
| Frame | Anodized aluminium alloy |
| Cable | 4mm ² (IEC) , Length:900mm or Customized length |
| Junction Box | IP 68 rated |

ABSOLUTE MAXIMUM RATING

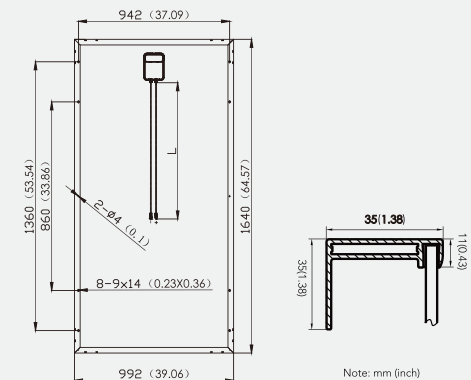
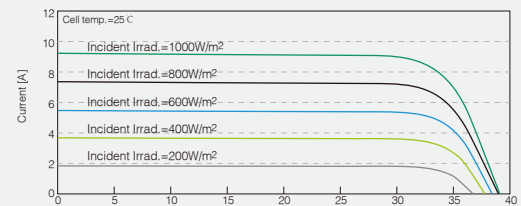
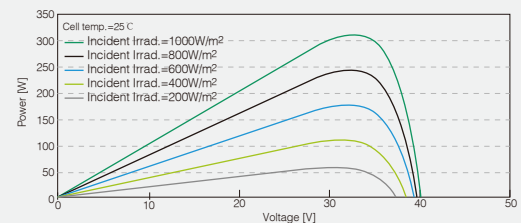
| Parameter | Values |
|-----------------------------------|-------------------|
| Operating Temperature | From -40 to +85°C |
| Hail Diameter @ 80km/h | Up to 25mm |
| Surface Maximum Load Capacity | Up to 5400Pa |
| Maximum Series Fuse Rating | 15A |
| IEC Application Class (IEC61730) | A |
| Fire Rating (IEC61730) | C |
| Module Fire Performance (UL 1703) | Type1 |
| Maximum System Voltage | DC 1000V (IEC) |

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER (FOR EU & APAC)

| | 1ph | 3ph | 3ph-MV |
|---|------|-------|--------|
| Minimum number of modules per string | 300 | | |
| | 305 | 8 | 16 |
| | 310 | | 18 |
| Maximum number of modules per string | 300 | 17 | 37 |
| | 305 | 17 | 36 |
| | 310 | 16 | 36 |
| Maximum power per string | 5250 | 11250 | 12750 |
| Parallel strings of different lengths or orientations | Yes | | |

- In compliance with our warranty terms and conditions.
- Measurement conditions under irradiance level of Standard Test Conditions (STC): 1000W/m²
Air mass 1.5 Spectrum, cell temperature of 25°C.

ELECTRICAL CHARACTERISTICS



PACKING CONFIGURATION

| Container | 20' GP | 40' HQ |
|------------------|--------|--------|
| Pieces/Container | 312 | 896 |

OUTPUT DURING OPERATION MODULES CONNECTED TO SOLAREEDGE INVER

| | |
|---|----------|
| Maximum output current | 15 Adc |
| Operating output voltage | 5-60 Vdc |
| Output in Standby mode with SolarEdge inverter or with SMI and Non-SolarEdge inverter (when disconnected from inverter or inverter off) | 1 Vdc |