

Phono[®] Solar

Premium Module

Mono/275-285W



Higher Efficiency

Outstanding performance in weak-light conditions



Better Durability

withstand fire/dust/UV/tear tests ensure its long durability in practical application scenarios



Higher Generation

Excellent temperature coefficient giving higher yields in the long term



Super Isolation

multilayer structure, against 21kV Hi-Voltage breakdown test extremely low water absorption & permeability guarantee its perfect performance in damp circumstance

Bloomberg
NEW ENERGY FINANCE

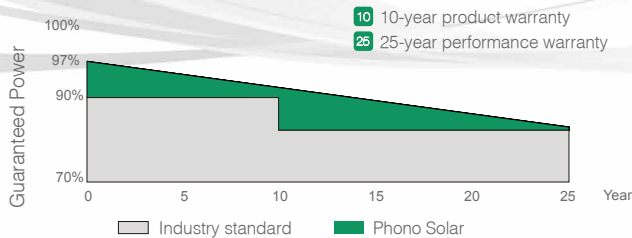
Tier1



TOP
PERFORMER



60
Cells



EN-20180516

SINOMACH | SUMEC
SUMEC GROUP CORPORATION

ELECTRICAL TYPICAL VALUES

Model	PS275M-20/U	PS280M-20/U	PS285M-20/U
Type	Monocrystalline 6 inch x 6 inch square, 6 × 10 pieces in series		
Rated Power (Pmpp)	275W	280W	285W
Tolerance		0~+5W	
Rated Current (Impp)	8.75	8.86	8.96
Rated Voltage (Vmpp)	31.43	31.61	31.81
Short Circuit Current (Isc)	9.10	9.15	9.20
Open Circuit Voltage (Voc)	38.40	38.50	38.60
Module Efficiency (%)	16.90	17.21	17.52
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) , 900mm
Junction Box	IP 68 rated

ABSOLUTE MAXIMUM RATING

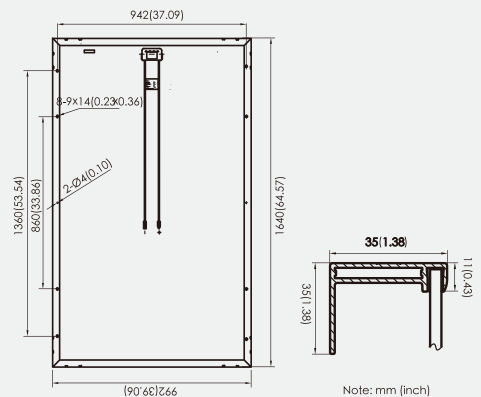
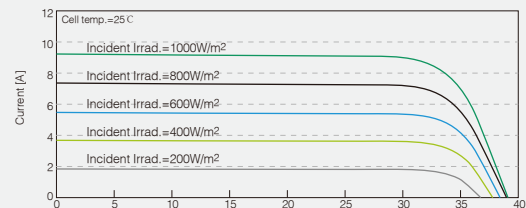
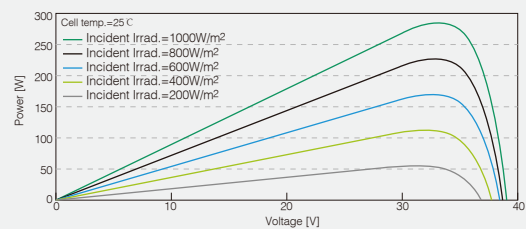
Parameter	Values
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Surface Maximum Load Capacity	Up to 5400Pa
Maximum Series Fuse Rating	20A
Application Class and Safety Class	II
Fire Rating (IEC61730)	C
Module Fire Performance (UL 1703)	Type1
Maximum System Voltage	DC 1000V/1500V (IEC/ETL)

PACKING CONFIGURATION

Container	20' GP	40' HQ
Pieces/Container	300	840

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

ELECTRICAL CHARACTERISTICS



Phono® Solar

Note: This datasheet is not legally binding. Phono Solar Technology Co., Ltd. reserves the right to adjust specifications without notice. Further information please refer to our [Website:www.phonosolar.com](http://www.phonosolar.com), [E-mail:info@phonosolar.com](mailto:info@phonosolar.com)