

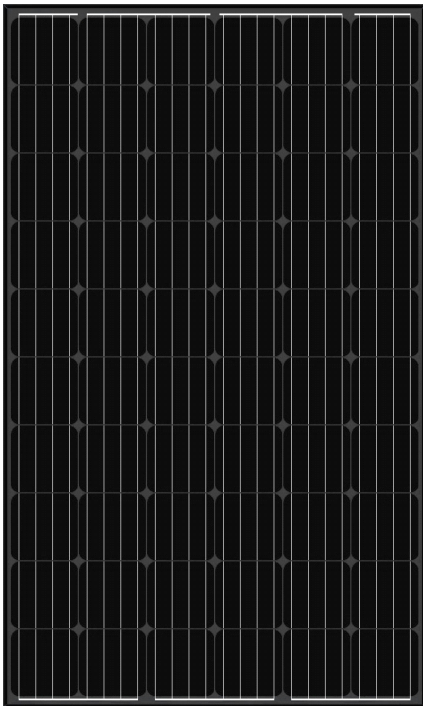
# PVM Sun Mono 300 BLACK

## MONOCRYSTALLINE PHOTOVOLTAIC MODULE

### Premium Quality Solar Module

### Data sheet

### KEY SALIENT FEATURES



Aesthetically appealing design with black backsheet and frame.

High module conversion efficiency up to 18.44% by using high efficient solar cells and advanced manufacturing technology.

Low degradation and excellent performance under high temperature and low light conditions.

Robust aluminum frame ensures the modules to withstand wind loads up to 2400Pa and snow loads up to 5400Pa.

High reliability against extreme environmental conditions (passing salt mist, ammonia and hail tests).

Potential induced degradation (PID) resistance.

Positive power tolerance of 0 ~ +3 %.



IEC61215, IEC61730, IEC62716, IEC61701, CE, CQC, CGC, ETL(USA), JET(Japan), J-PEC(Japan), Kemco(South Korea), KS(South Korea), MCS(UK), CEC(Australia), FSEC(FL-USA), CSI Eligible(CA-USA), Israel Electric(Israel), InMetro(Brazil), TSE(Turkey)

ISO9001:2008: Quality management system

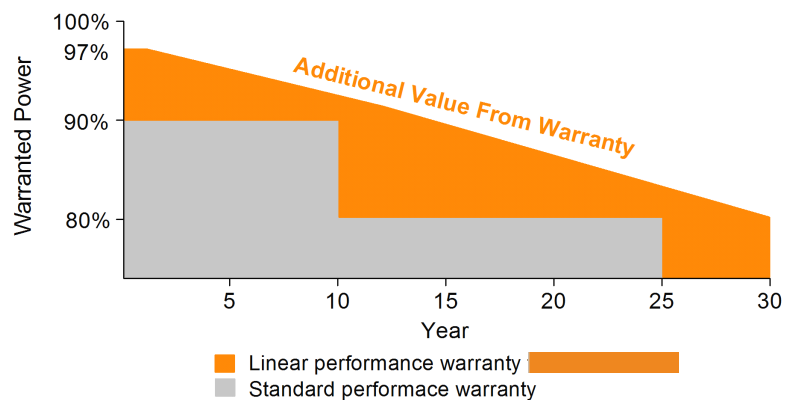
ISO14001:2004: Environmental management system

OHSAS18001:2007: Occupational health and safety management system

### SPECIAL WARRANTY

12 years limited product warranty

Limited linear power warranty: 12 years 91.2% of the nominal power output, 30 years 80.6% of the nominal power output.



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## Electrical Characteristics at STC

Nominal Power ( $P_{max}$ )	255W	260W	265W	270W	275W	280W	285W	290W	295W	300W
Open Circuit Voltage ( $V_{oc}$ )	37.9V	38.0V	38.1V	38.2V	38.3V	38.4V	38.5V	38.6V	38.7V	38.8V
Short Circuit Current ( $I_{sc}$ )	8.76A	8.88A	9.00A	9.12A	9.24A	9.37A	9.49A	9.62A	9.75A	9.88A
Voltage at Nominal Power ( $V_{mp}$ )	30.8V	30.9V	31.0V	31.1V	31.2V	31.3V	31.4V	31.5V	31.6V	31.7V
Current at Nominal Power ( $I_{mp}$ )	8.28A	8.42A	8.55A	8.69A	8.82A	8.95A	9.08A	9.21A	9.34A	9.47A
Module Efficiency (%)	15.67	15.98	16.29	16.60	16.90	17.21	17.52	17.83	18.13	18.44
Operating Temperature	-40°C to +85°C									
Maximum System Voltage	1000V DC									
Fire Resistance Rating	Type 1(in accordance with UL1703)/Class C(IEC61730)									
Maximum Series Fuse Rating	15A									

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5

## Electrical Characteristics at NOCT

Nominal Power ( $P_{max}$ )	189W	192W	196W	200W	204W	207W	211W	215W	218W	222W
Open Circuit Voltage ( $V_{oc}$ )	34.9V	35.0V	35.1V	35.2V	35.3V	35.4V	35.5V	35.6V	35.7V	35.8V
Short Circuit Current ( $I_{sc}$ )	7.10A	7.19A	7.29A	7.39A	7.48A	7.59A	7.69A	7.79A	7.90A	8.00A
Voltage at Nominal Power ( $V_{mp}$ )	28.0V	28.1V	28.2V	28.3V	28.4V	28.5V	28.6V	28.7V	28.8V	28.9V
Current at Nominal Power ( $I_{mp}$ )	6.75A	6.84A	6.95A	7.07A	7.19A	7.27A	7.38A	7.50A	7.57A	7.68A

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## Mechanical Characteristics

Cell type	Monocrystalline 156x156mm (6x6inches)
Number of cells	60 (6x10)
Module dimensions	1640x992x40mm (64.57x39.06x1.57inches)
Weight	18.5kg (40.8lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP67, 3 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), 900mm (35.43inches)
Connector	MC4 or MC4 compatible

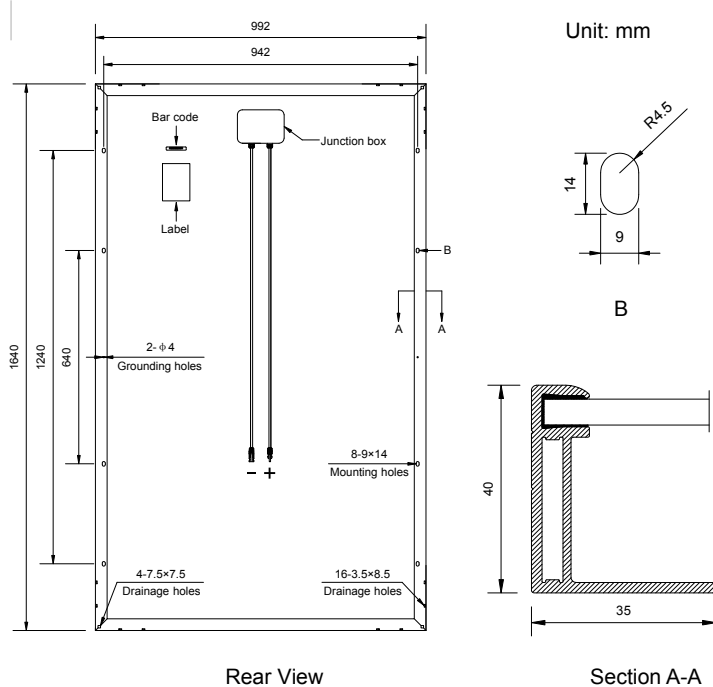
## Temperature Characteristics

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of $P_{max}$	-0.41%/°C
Temperature Coefficients of $V_{oc}$	-0.31%/°C
Temperature Coefficients of $I_{sc}$	0.05%/°C

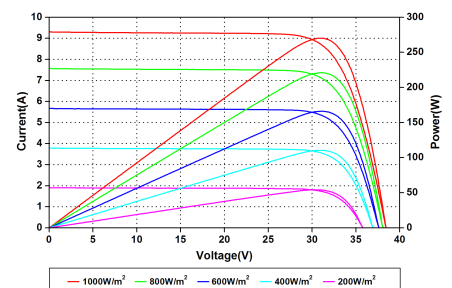
## Packaging

Standard packaging	26pcs/pallet
Module quantity per 20' container	312pcs
Module quantity per 40' container	728pcs(GP)/784pcs(HQ)

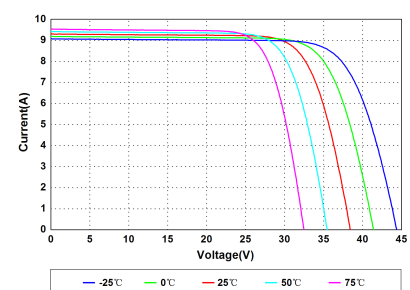
## Engineering Drawings



## IV Curves



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures

Specifications in this datasheet are subject to change without prior notice.