

Monocrystalline PV Module

SM-400~415W(108)

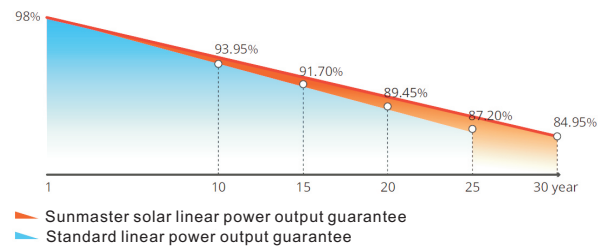
400-415W

QUALITY GUARANTEE

- 15-Year material & technology warranty
- 30-Year linear power output warranty

CERTIFICATIONS

- IEC 61215, IEC 61730, CE
- ISO 9001 :2015: Quality management system
- ISO 14001 :2015: Environmental management system
- ISO 45001 :2018: Occupational health and safety management system



SUPER PERFORMANCE & PROVEN ADVANTAGES

- High module conversion efficiency up to 21.25% by using innovative Half-cell design and Multi-busbar(MBB) cell technology.
- Low temperature coefficient 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.



MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 182*91mm
Number of cells	108(6x18)
Module dimensions	1722x1134x35mm (67.80x44.65x1.38inches)
Weight	21.5kg (47.4lbs)
Front cover	3.2mm(0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	≥IP68 & UL
Cable	4mm ² (0.006inches ²), Portrait: 300mm (11.81inches); Landscape: 1200mm (47.24inches)
Connector	MC4 or MC4 compatible

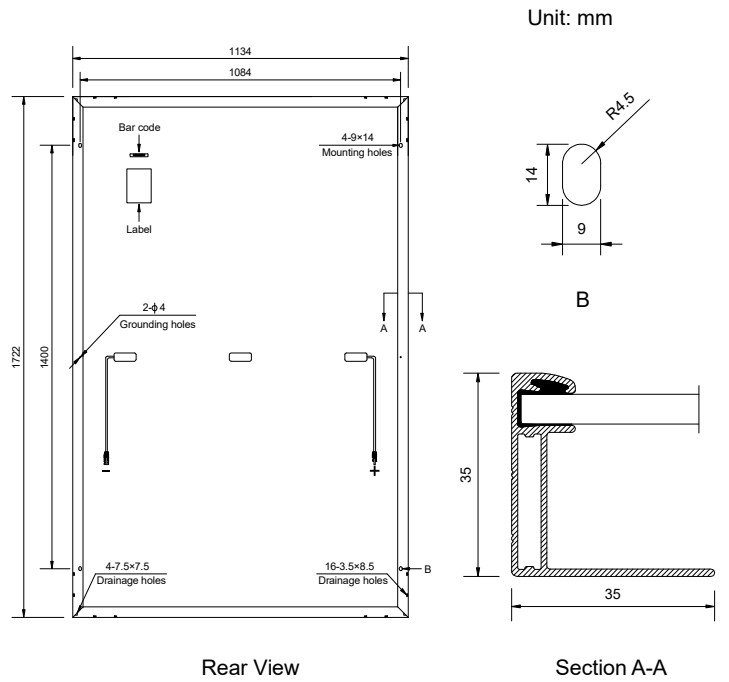
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of Pmax	-0.36% / °C
Temperature Coefficients of Voc	-0.28% / °C
Temperature Coefficients of Isc	0.05% / °C

PACKAGING

Standard packaging	31pcs/pallet
Module quantity per 20' container	186pcs
Module quantity per 40' container	806pcs(HQ)

ENGINEERING DRAWINGS



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

ELECTRICAL CHARACTERISTICS AT STC

Maximum Power (Pmax)	400W	405W	410W	415W
Open Circuit Current (Voc)	37.2V	37.4V	37.6V	37.8V
Short Circuit Current (Isc)	13.7A	13.76A	13.82A	13.88A
Voltage at Maximum Power (Vmp)	31.0V	31.2V	31.4V	31.6V
Current at Maximum Power (Imp)	12.91A	12.99A	13.06A	13.14A
Module Efficiency(%)	20.49	20.74	21.00	21.25
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC/1500V DC			
Fire Resistance Rating	Type 1(in accordance with UL 1703)/Class C(IEC61730)			
Maximum Series Fuse Rating	25A			

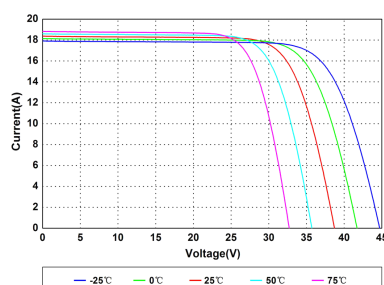
STC Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of Pmax ±3%; Measurement Tolerance ±3%

ELECTRICAL CHARACTERISTICS AT NOCT

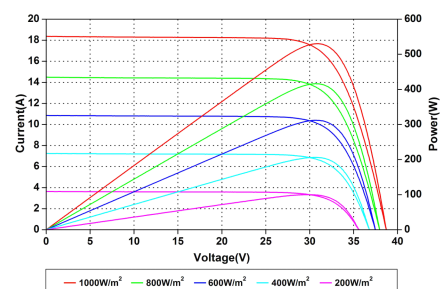
Maximum Power (Pmax)	300W	304W	308W	312W
Open Circuit Current (Voc)	34.2V	34.4V	34.6V	34.8V
Short Circuit Current (Isc)	11.10A	11.15A	11.2A	11.25A
Voltage at Maximum Power (Vmp)	28.2V	28.4V	28.6V	28.8V
Current at Maximum Power (Imp)	10.64A	10.71A	10.77A	10.84A

NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1m/s

IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures