

5 - 325 Watt

MONO SOLAR PANEL

FEATURES



High Module Conversion Efficiency
Up to 19.27%, through superior cell technology and leading manufacturing capability



Positive Tolerance
Guaranteed positive tolerance ~+5% ensures reliable power output



Intensive Wind and Snow Load Tests
Entire module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal)



Excellent Weak Light Performance
Excellent performance under low light environments to capture early morning and late evening sunlight



World Class Manufacturing Facilities
Our manufacturing facilities are ISO certified for quality assurance and delivers world class products



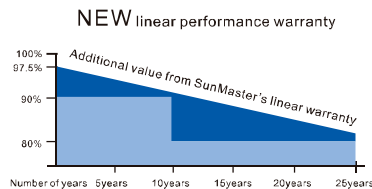
Insured by CHUBB Insurance Policy / by reputed international insurance company



Trust 5-325 Watt Mono Series for Reliable Performance Over Time

- World's trusted manufacturer of crystalline silicon photovoltaic modules
- Un-rivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards
- Tested for harsh environment

Trust 5-325 Watt Mono Series for Reliable Performance Over Time



10 years product warranty, First 10 years up to 90% & next 15 years up to 80% of performance warranty
§ Based on nominal power (Pnom)



Superior Frame Design
Specially designed drainage holes and rigid construction prevent frames from deforming. Screw less frame design for a long term durability.



Most Modern IP65 Rated Junction Box
IP65 rated Supports any orientation installation. High performance low resistance connectors ensure maximum module power output for highest energy production.

Mono-crystalline solar panel

Power	Model	Voc	Isc	Vmp	Imp	Panel Size(mm)	N.W.	Cell Array Qty	Cell Size	Efficiency	
5W	SM05M	11v	0.61A	9v	0.56A	340 x 130 x 17mm	0.5kg	2 x 9	18pc	156x10mm	17.16%
10W	SM10M	11v	1.22A	9v	1.11A	340 x 210 x 17mm	1.0kg	2 x 9	18pc	156x20mm	17.32%
20W	SM20M	22v	1.23A	18v	1.11A	340 x 420 x 25mm	1.6kg	2 x 18	36pc	156x20mm	17.28%
30W	SM30M	22v	1.84A	18v	1.67A	670 x 320 x 30mm	2.6kg	4 x 9	36pc	156x30mm	17.12%
40W	SM40M	22v	2.44A	18v	2.22A	670 x 420 x 30mm	3.3kg	4 x 9	36pc	156x40mm	17.41%
50W	SM50M	22v	3.06A	18v	2.78A	670 x 480 x 30mm	4.2kg	4 x 9	36pc	156x50mm	17.23%
60W	SM60M	22v	3.67A	18v	3.33A	670 x 570 x 30mm	5.0kg	4 x 9	36pc	156x60mm	17.14%
70W	SM70M	22v	4.31A	18v	3.89A	670 x 660 x 30mm	5.5kg	4 x 9	36pc	156x70mm	17.12%
80W	SM80M	22v	4.89A	18v	4.45A	670 x 750 x 30mm	5.8kg	4 x 9	36pc	156x80mm	17.23%
90W	SM90M	22v	5.52A	18v	5.00A	670 x 860 x 30mm	6.2kg	4 x 9	36pc	156x90mm	17.77%
100W	SM100M	22v	6.04A	18v	5.56A	670 x 950 x 30mm	6.5kg	4 x 9	36pc	156x100mm	17.55%
110W	SM110M	22v	6.68A	18v	6.11A	670 x 1050 x 30mm	7.0kg	4 x 9	36pc	156x110mm	17.43%
120W	SM120M	22v	7.35A	18v	6.67A	670 x 1150 x 35mm	7.5kg	4 x 9	36pc	156x120mm	17.63%
130W	SM130M	22v	7.97A	18v	7.22A	670 x 1250 x 35mm	8.2kg	4 x 9	36pc	156x130mm	17.56%
140W	SM140M	22v	8.56A	18v	7.78A	670 x 1350 x 35mm	9.2kg	4 x 9	36pc	156x140mm	17.45%
150W	SM150M	22v	9.12A	18v	8.34A	670 x 1420 x 35mm	10.5kg	4 x 9	36pc	156x150mm	17.33%
160W	SM160M	44v	4.86A	36v	4.45A	992 x 1000 x 40mm	11.0kg	6 x 12	72pc	156x78mm	17.45%
170W	SM170M	44v	5.34A	36v	4.72A	992 x 1060 x 40mm	11.5kg	6 x 12	72pc	156x83mm	17.25%
175W	SM175M	44v	5.53A	36v	4.86A	992 x 1100 x 40mm	12.2kg	6 x 12	72pc	156x85mm	17.18%
180W	SM180M	44v	5.62A	36v	5.00A	992 x 1150 x 40mm	13.5kg	6 x 12	72pc	156x88mm	17.32%
190W	SM190M	44v	5.79A	36v	5.28A	992 x 1200 x 40mm	14.5kg	6 x 12	72pc	156x93mm	17.26%
200W	SM200M	44v	6.13A	36v	5.56A	992 x 1250 x 40mm	15.0kg	6 x 12	72pc	156x98mm	17.34%
210W	SM210M	44v	6.26A	36v	5.83A	992 x 1320 x 40mm	15.5kg	6 x 12	72pc	156x103mm	17.28%
220W	SM220M	44v	6.69A	36v	6.11A	992 x 1380 x 40mm	16.0kg	6 x 12	72pc	156x108mm	17.15%
240W	SM240M	44v	7.38A	36v	6.67A	992 x 1420 x 40mm	17.0kg	6 x 12	72pc	156x113mm	17.35%
250W	SM250M	37v	9.04A	30v	8.33A	992 x 1620 x 40mm	19.0kg	6 x 10	60pc	156x156mm	17.11%
260W	SM260M	37v	9.12A	30v	8.67A	992 x 1620 x 40mm	19.0kg	6 x 10	60pc	156x156mm	17.31%
270W	SM270M	37v	9.43A	30v	9.00A	992 x 1620 x 40mm	19.0kg	6 x 10	60pc	156x156mm	17.45%
280W	SM280M	43v	8.35A	36v	7.78A	992 x 1620 x 40mm	19.0kg	6 x 10	60pc	156x156mm	17.98%
290W	SM290M	44v	8.87A	36v	8.06A	992 x 1956 x 50mm	22.0kg	6 x 12	72pc	156x156mm	17.12%
300W	SM300M	44v	9.05A	36v	8.33A	992 x 1956 x 50mm	22.0kg	6 x 12	72pc	156x156mm	17.44%
310W	SM310M	44v	9.36A	36v	8.61A	992 x 1956 x 50mm	22.0kg	6 x 12	72pc	156x156mm	17.78%

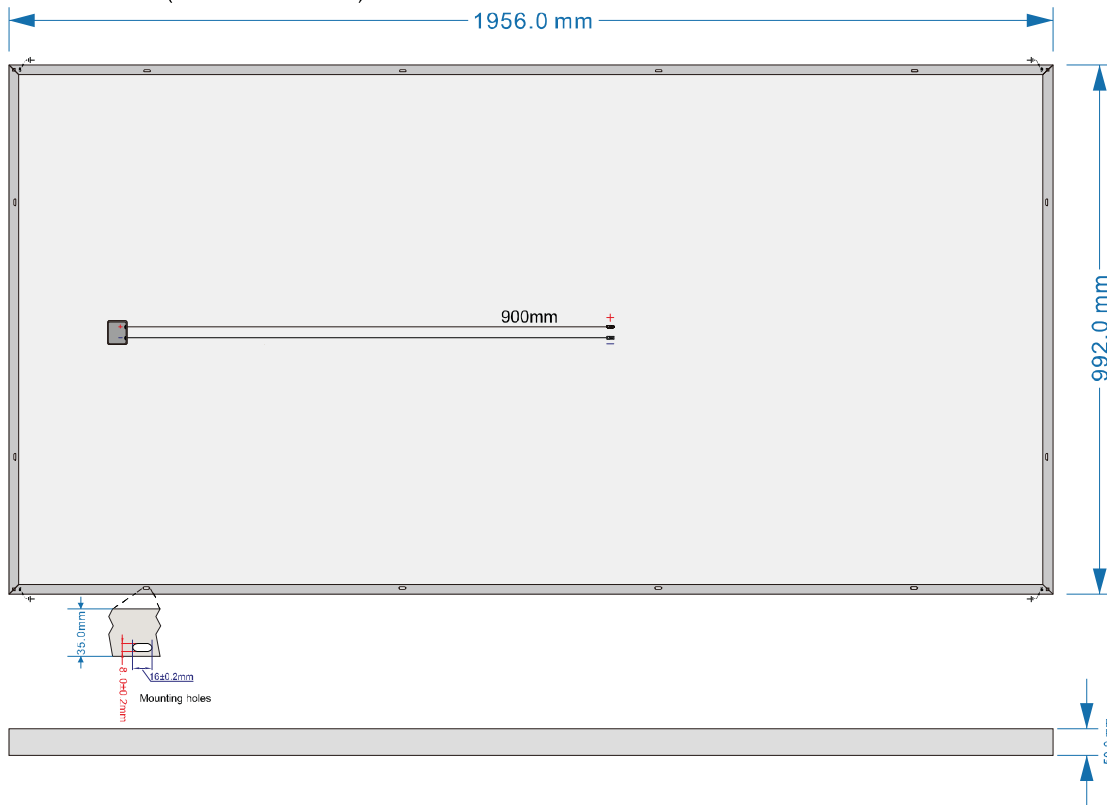


单晶电池片
Mono-crystalline solar cell



For customized design, please contact SunMaster sales team.

SM300M Dimensions (Measurements in mm).



ELECTRICAL DATA @ STC	SM315M	SM310M	SM305M	SM300M
Nominal Power - P _{MPP} (Wp)	315	310	305	300
Watt Class Sorting - (W)	0/+15	0/+10	0/+5	0/+0
Nominal Power Voltage - V _{MPP} (V)	36.0	36.0	36.0	36.0
Nominal Power Current - I _{MPP} (A)	8.75	8.61	8.47	8.33
Open Circuit Voltage - V _{OC} (V)	44.0	43.0	43.0	43.0
Short Circuit Current - I _{SC} (A)	9.05	8.87	8.72	8.58
Panel Efficiency (%)	18.02	17.78	17.54	17.44

Values at standard test conditions STC (airmass AM 1.5, irradiance 1000 W/m², cell temperature 25°C).
At low irradiance of 200 W/m² (AM1.5 and cell temperature 25°C) at least 94% of the STC module efficiency will be achieved.

18.02% EFFICIENCY

10 YEAR PRODUCT WARRANTY

25 YEAR LINEAR POWER OUTPUT WARRANTY

TEMPERATURE RATINGS

Nominal operating cell temperature (NOCT) 45°C (±2°C)	
Temperature coefficient of P _{mpp}	-0.39 %/°C
Temperature coefficient of V _{oc}	-0.30%/°C
Temperature coefficient of I _{sc}	0.045 %/°C

GENERAL DATA

Cell type:	Mono-crystalline 6 strings of 12 cells(156x 156 m m)
Glass:	3.2 mm solar glass with anti-reflective surface treatment
Back sheet:	uble layer highly resistant polyester
Frame:	Anodized aluminum (silver)
Junction box:	3-part with bypass diodes IP65 rated 4mm ² solar cable, 0.9 m standard
Connectors:	Multi-Contact MC4 (4mm ²)

MAXIMUM RATINGS

Operational temperature:	-45...+85°C
Maximum system voltage:	1000V
Maximum snow load:	550 kg/m ² (5400Pa)
Maximum wind load:	244 kg/m ² (2400 Pa)
Max series fuse rating:	25 A
Max reverse current:	25 A

CERTIFICATIONS



WARRANTY

10 year product warranty
25 year linear power output warranty
(max. degradation in performance of 0.7% p.a.)
See warranty conditions for further details.

MECHANICAL DATA

Dimensions:	1956x992 x 50mm
Area:	1.94m ²
Weight:	22kg

Note! Specifications subject to change without notice.