

eArc

SMF310M-5X12DW

310 Watt

60 Cell Monocrystalline Module



Ultra-light: Glass free module weighs 5.0 kg, 70% lighter than conventional glass modules.



Fast-Installation: Through "Quick-Bonding" installation, eArc requires no penetration, reduces time on roof by 40% and eliminates the use of mounting hardware.



Aesthetic: Seamless integration with underlying installation surface.



Durable: eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL1703 (USA). eArc has also passed PID, salt mist and ammonia corrosion tests.

POWER OUTPUT RANGE 305~310 W

POWER TOLERANCE 0-5 W

LINEAR PERFORMANCE WARRANTY

CAUTION: Read installation manual before using the product.

©2021 Sunman (zhenjiang) Co.,Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.

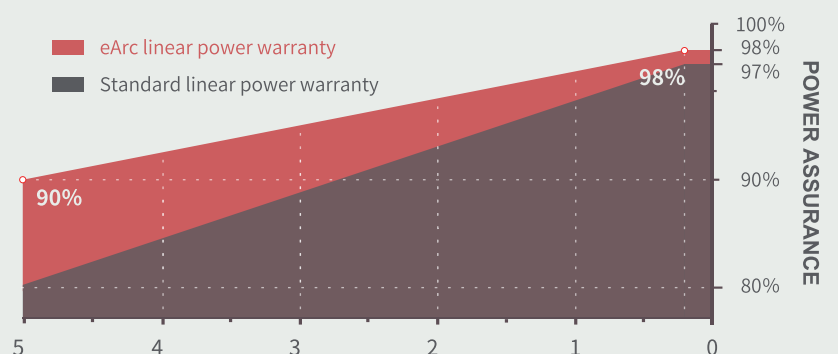
5 Year Linear Power Warranty



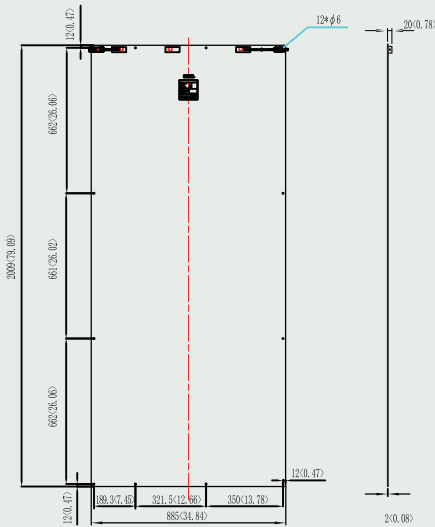
www.sunman-energy.com



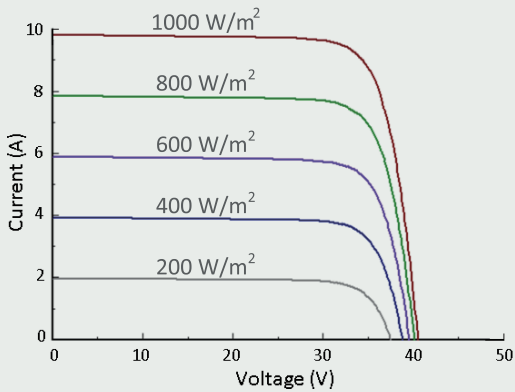
ULTRA-LIGHT & FLEXIBLE SOLAR PANEL



DIMENSIONS

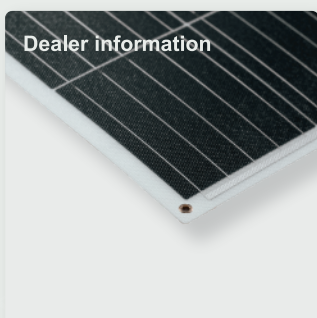


I-V CURVE (310)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT)	41±2 °C
Temperature Coefficient of P_{max}	-0.38 %/°C
Temperature Coefficient of V_{oc}	-0.28 %/°C
Temperature Coefficient of I_{sc}	0.020 %/°C



SMFDW IEC EN 2022B

ELECTRICAL CHARACTERISTICS

STC	SMF305M-5X12DW	SMF310M-5X12DW
Maximum Power (P_{max})	305	310
Maximum Power Voltage (V_{mp})	33.0	33.3
Maximum Power Current (I_{mp})	9.25	9.31
Open-circuit Voltage (V_{oc})	40.3	40.5
Short-circuit Current (I_{sc})	9.74	9.81
Module Efficiency (%)	17.2	17.4
Operating Temperature	-40 °C to 85 °C	
Maximum System Voltage	1000 V DC (IEC)	
Maximum Series Fuse Rating	20 A	
Application Class	Class A	
Power Tolerance	0/+5 W	

STC: Irradiance 1000W/m², Cell temperature 25 °C, AM=1.5. Tolerances of P_{max} , V_{oc} and I_{sc} are within ±5%

NMOT	SMF305M-5X12DW	SMF310M-5X12DW
Maximum Power (P_{max})	229	233
Maximum Power Voltage (V_{mp})	30.5	30.7
Maximum Power Current (I_{mp})	7.51	7.59
Open-circuit Voltage (V_{oc})	37.4	37.6
Short-circuit Current (I_{sc})	7.96	8.04

NMOT: Irradiance 800W/m², Ambient temperature 20 °C, AM=1.5, Wind speed 1 m/s.

MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon (158.75mm)
No. of Cells	60 (5×12)
Module Dimensions	2009×885×2 mm
Weight	5.0kg
Backsheet	White
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)450 mm / (-)450 mm
Connector	MC4 compatible

PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	66+10	66+11
Pieces per container	710	1617