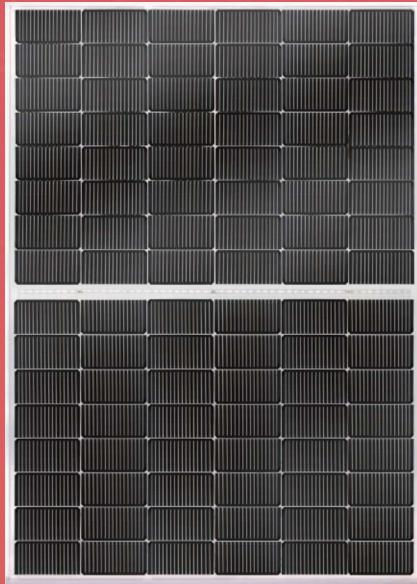


# eArc

**SMB450R-6X16DW-G**

**450 Watt**

**96 N Type Half Cell Monocrystalline Module**



**Ultra-light:** With ultra-thin glass and innovative encapsulation technology, this module weighs only 14.6 kg. 40% lighter than conventional glass modules.



**Fast-Installation:** Easy handling and quick installation which reduce installation costs and improve safety.



**Aesthetic and reliable:** Flat appearance, with excellent loading capacity and hail resistance.



**Durable:** Excellent weather resistance and fire resistance. Certified to IEC 61215:2021, IEC61730:2023 and UL61730.

**POWER OUTPUT RANGE**

450 W

**POWER TOLERANCE**

0-5 W

## LINEAR PERFORMANCE WARRANTY

**12 Year Product Warranty**

CAUTION: Read installation manual before using the product.  
©2025 SunMan (zhenjiang) Co.,Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.

**25 Year Linear Power Warranty**

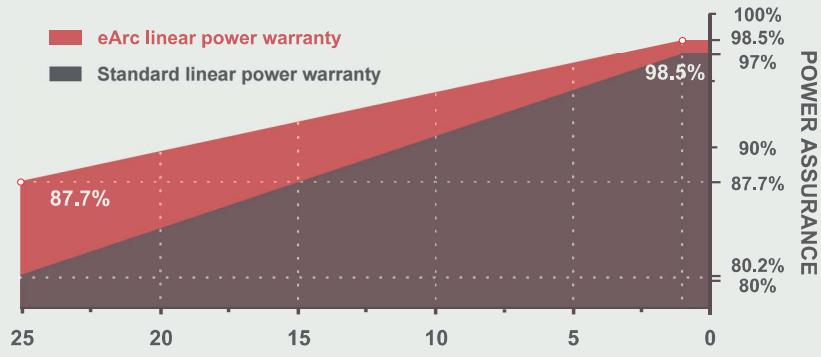


[www.sunman-energy.com](http://www.sunman-energy.com)

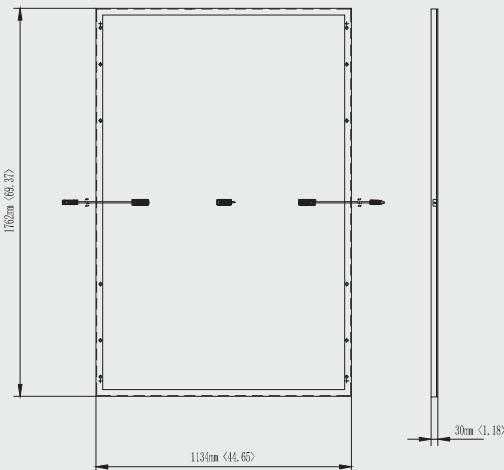


ULTRA-LIGHT SOLAR PANEL

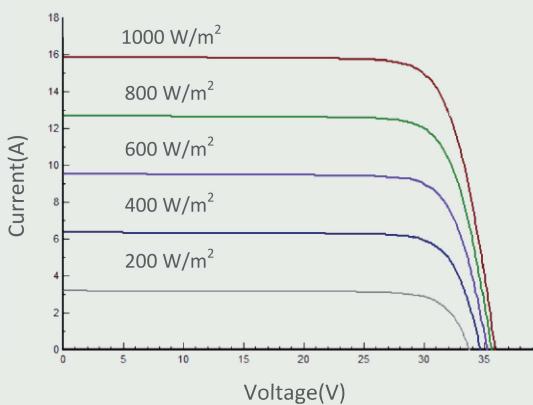
Made in China



## DIMENSIONS



## I-V CURVE (450) @25



## TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT)	41±2 °C
Temperature Coefficient of $P_{max}$	-0.29 %/°C
Temperature Coefficient of $V_{oc}$	-0.25 %/°C
Temperature Coefficient of $I_{sc}$	0.045 %/°C



## ELECTRICAL CHARACTERISTICS

STC	SMB450R-6X16DW-G
Maximum Power ( $P_{max}$ )	450
Maximum Power Voltage ( $V_{mp}$ )	30.12
Maximum Power Current ( $I_{mp}$ )	14.95
Open-circuit Voltage ( $V_{oc}$ )	35.92
Short-circuit Current ( $I_{sc}$ )	15.89
Module Efficiency (%)	22.52
Operating Temperature (T98)	-40 °C to 70 °C
Maximum System Voltage	1500 V DC (IEC)
Maximum Series Fuse Rating	25 A
Application Class	Class A
Power Tolerance	0/+5 W
Fire class rating	Class C

STC: Irradiance 1000W/m², Cell temperature 25 °C, AM=1.5.

Tolerances of  $P_{max}$ ,  $V_{oc}$  and  $I_{sc}$  are within ±5%

NMOT	SMB450R-6X16DW-G
Maximum Power ( $P_{max}$ )	364.8
Maximum Power Voltage ( $V_{mp}$ )	30.40
Maximum Power Current ( $I_{mp}$ )	11.99
Open-circuit Voltage ( $V_{oc}$ )	36.10
Short-circuit Current ( $I_{sc}$ )	12.70

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

## MECHANICAL CHARACTERISTICS

Solar Cell	N Type Monocrystalline silicon(210mm half cell)
No. of Cells	96 (6×16)
Module Dimensions	1762×1134×30mm
Weight	14.6kg ±3%
Backsheet	White
Frame	Anodized Aluminium Alloy
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2 , (+)300 / (-)300 mm
Connector	Stäubli Electrical Connectors AG PV-KST4-EVO2A/xy / PV-KBT4-EVO2A/xy

## PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	36	36
Pieces per container	216	864