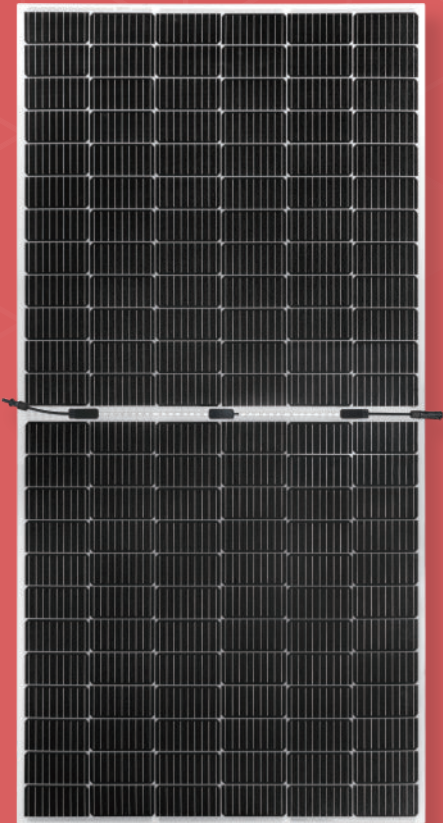


# eArc

## SMF430F-6X24UW

# 430 Watt

## 144 Half Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 7.2 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 425~430 W

POWER TOLERANCE 0-5 W

**12 Year Product Warranty**

**25 Year Linear Power Warranty**



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

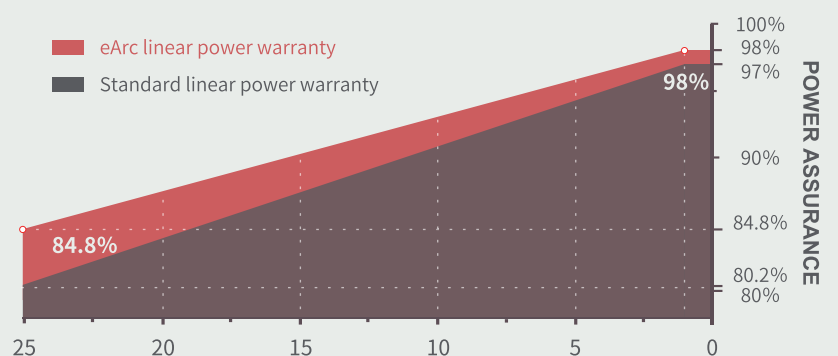


ULTRA-LIGHT & FLEXIBLE SOLAR PANEL

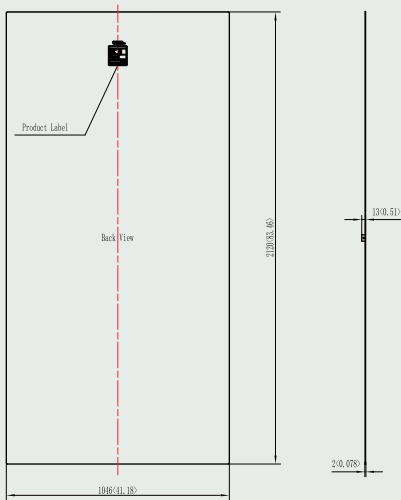
### LINEAR PERFORMANCE WARRANTY

CAUTION: Read installation manual before using the product.

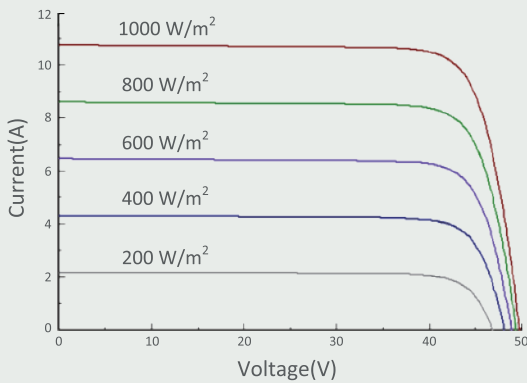
©2021 Sunman (zhenjiang) Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.



## DIMENSIONS



## I-V CURVE (430)



## TEMPERATURE CHARACTERISTICS

|  |                   |
|--|-------------------|
| Nominal Module Operating Temperature(NOMT) | <b>41±2 °C</b>    |
| Temperature Coefficient of $P_{max}$       | <b>-0.38 %/°C</b> |
| Temperature Coefficient of $V_{oc}$        | <b>-0.28 %/°C</b> |
| Temperature Coefficient of $I_{sc}$        | <b>0.020 %/°C</b> |



SMF425F/IEC EN 2022B

## ELECTRICAL CHARACTERISTICS

| STC                                | SMF425F-6X24UW  | SMF430F-6X24UW |
|------------------------------------|-----------------|----------------|
| Maximum Power ( $P_{max}$ )        | 425             | 430            |
| Maximum Power Voltage ( $V_{mp}$ ) | 41.8            | 42.0           |
| Maximum Power Current ( $I_{mp}$ ) | 10.17           | 10.24          |
| Open-circuit Voltage ( $V_{oc}$ )  | 49.6            | 49.8           |
| Short-circuit Current ( $I_{sc}$ ) | 10.67           | 10.74          |
| Module Efficiency (%)              | 19.2            | 19.4           |
| 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/m<sup>2</sup>, Cell temperature 25 °C, AM=1.5.

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

| NMOT                               | SMF425F-6X24UW | SMF430F-6X24UW |
|------------------------------------|----------------|----------------|
| Maximum Power ( $P_{max}$ )        | 321.4          | 325.1          |
| Maximum Power Voltage ( $V_{mp}$ ) | 38.6           | 38.8           |
| Maximum Power Current ( $I_{mp}$ ) | 8.33           | 8.38           |
| Open-circuit Voltage ( $V_{oc}$ )  | 46.6           | 46.8           |
| Short-circuit Current ( $I_{sc}$ ) | 8.64           | 8.69           |

NMOT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20 °C, AM=1.5, Wind speed 1 m/s.

## MECHANICAL CHARACTERISTICS

|                   |   |
|-------------------|---|
| Solar Cell        | Monocrystalline silicon(166mm half cell)                      |
| No. of Cells      | 144 (6×24)  |
| Module Dimensions | 2120×1046×2 mm  |
| Weight            | 7.2kg   |
| Backsheet         | White   |
| Frame             | Frameless   |
| J-box             | IP 68 rated   |
| Output Cables     | Photovoltaic technology cable 4.0 mm 2, (+)100 mm / (-)100 mm |
| Connector         | MC4 compatible  |

## PACKAGING CONFIGURATION

|                      | 20' GP | 40' HC |
|----------------------|--------|--------|
| Module per pallet    | 66+40  | 66+40  |
| Pieces per container | 530    | 1400   |