

**LUX5 STM425-54M-T8** PERC

**405-425W**



Excellent low-light power generation effect, ensuring continuous output in cloudy, shading conditions.



Whole process of manufacturing adheres to the green concept, fluorine-free and low-lead.



Minimized micro-cracks with innovative non-destructive cutting Technology.



Selection of packaging materials with excellent sealing  
More advanced cell processing technology to reduce doping to ensure highly PID resistance.



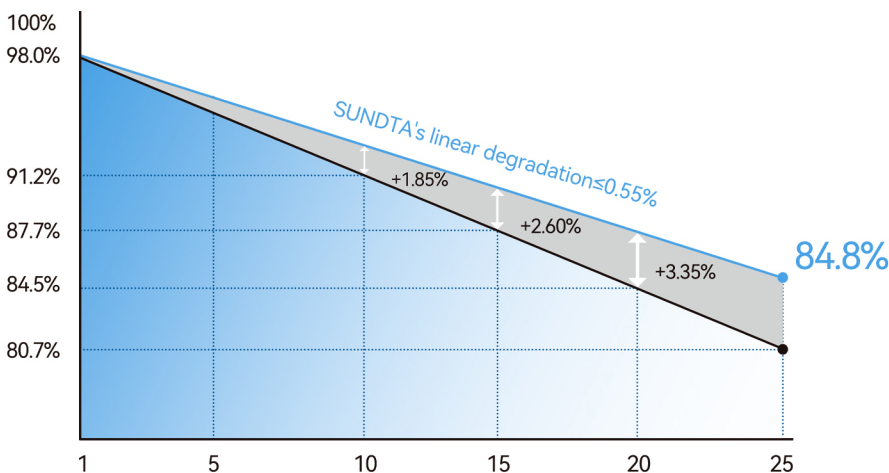
Sand blowing test, salt mist test and ammonia test passed to adapt with harsh environments



Mechanical performance up to 5400 Pa positive load and 2400 Pa. Negative load.

**Complete System and Product Certifications**

IEC61215/IEC61730/IEC61701/IEC62716/UL61730  
ISO 9001: Quality Management System  
ISO 14001: Environmental Management System  
ISO14064: Greenhouse Gases Emissions Verification  
ISO45001: Occupational Health and Safety Management System



15 Years Warranty for Materials and Processing



25 Years Warranty for Extra Linear Power Output

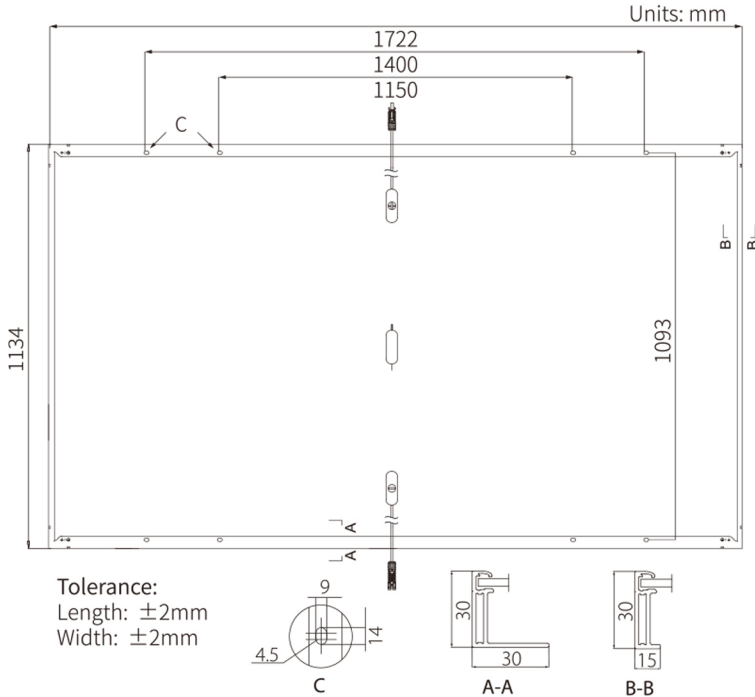
**21.8%**  
Max Efficiency

**0-3%**  
Power Tolerance

**1722x1134x30mm**  
Dimension

**20.8kg**  
Weight

**PERC Half-cell**



## Mechanical Characteristics

Cell Orientation	108 (6x18)
Dimension	1722x1134x30mm
Weight	20.8kg
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1200mm Length can be customized
Packaging	36pcs/pallet, 936pcs/40'HQ

## Electrical Data (STC)

	405W	410W	415W	420W	425W
Maximum Power(Pmax)	405W	410W	415W	420W	425W
Maximum Power Voltage(Vmp)	31.00V	31.25V	31.49V	31.73V	31.94V
Maximum Power Current(Imp)	13.07A	13.12A	13.18A	13.24A	13.31A
Open-circuit Voltage(Voc)	37.00V	37.25V	37.50V	37.75V	37.96V
Short-circuit Current(Isc)	13.83A	13.88A	13.94A	14.01A	14.08A
Module Efficiency(%)	20.70%	21.00%	21.30%	21.50%	21.80%

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

## Electrical Data (NOCT)

	302.7W	306.5W	310.2W	313.9W	317.7W
Maximum Power(Pmax)	302.7W	306.5W	310.2W	313.9W	317.7W
Maximum Power Voltage(Vmp)	28.80V	29.03V	29.25V	29.47V	29.67V
Maximum Power Current(Imp)	10.52A	10.56A	10.60A	10.65A	10.71A
Open-circuit Voltage(Voc)	34.79V	35.02V	35.26V	35.49V	35.69V
Short-circuit Current(Isc)	11.18A	11.22A	11.27A	11.32A	11.38A
Module Efficiency(%)	20.70%	21.00%	21.30%	21.50%	21.80%

NOCT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s.

## Temperature Ratings(STC)

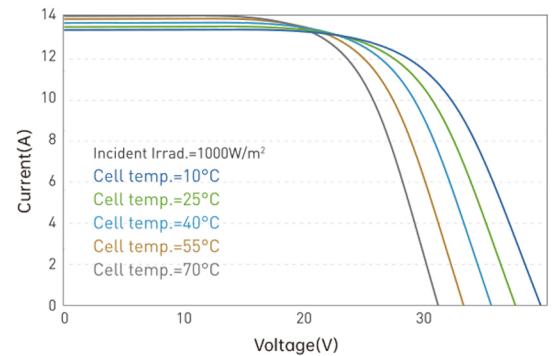
Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.265%/°C
Temperature Coefficient of Pmax	-0.340%/°C
NOCT (Nominal operating cell temperature)	45±2°C

## Operating Parameters

Operating temperature(°C)	-40°C~+85°C
Maximum system voltage	DC1500V(IEC/UL)
Maximum series fuse rating	25A
Power tolerance	0-3%

## Curve

I-V Curve at different Temperature (420W)



I-V/P-V Curve at different Irradiation (420W)

