

DAS STM440-46S **SHINGLED**

420-440W



Innovative stack structure, low-temperature adhesive bonding, high-density layout



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.

PID

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



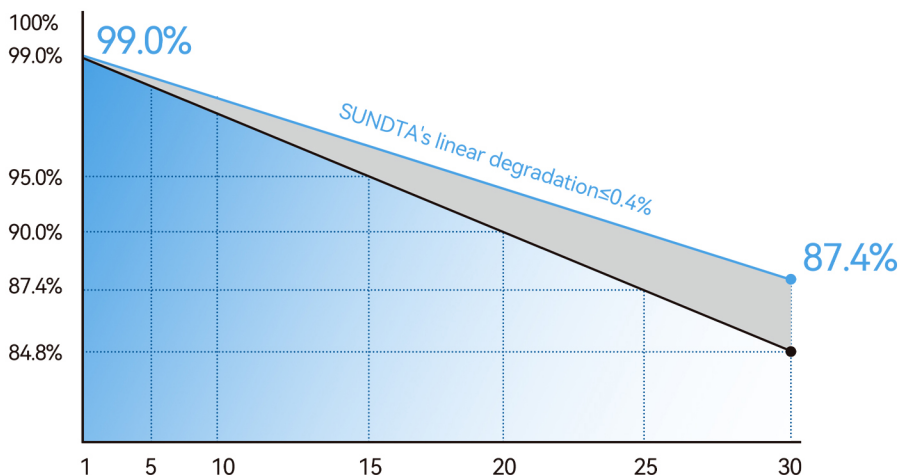
Sand blowing test, salt mist test and ammonia test passed to adapt with harsh environments



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



30 Years Warranty for Extra Linear Power Output

22.20%

Max Efficiency

0-3%

Power Tolerance

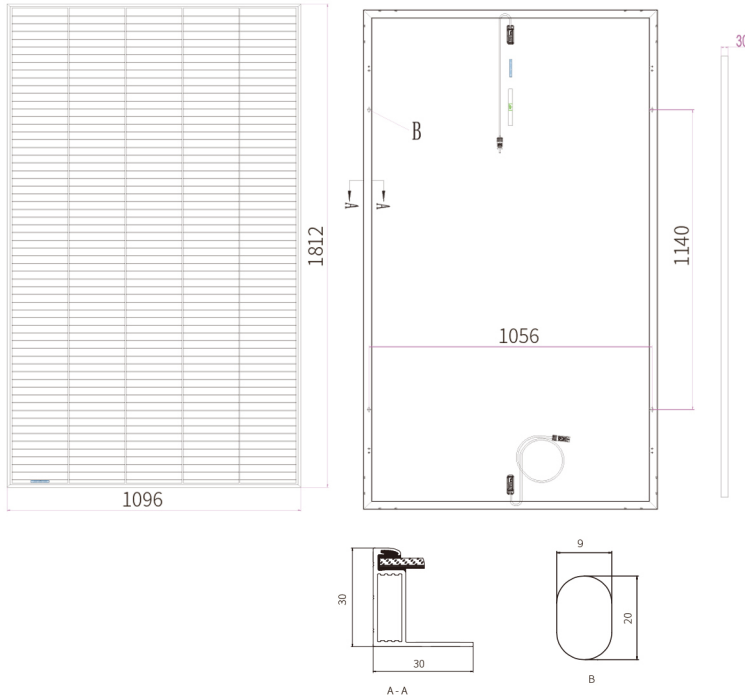
1812x1069x30mm

Dimension

21.2kg

Weight

Shingled Cell



Mechanical Characteristics

Cell Type	Mono-crystalline solar cell
Dimension	1812x1096x30mm
Weight	21.2kg
Glass	3.2mm AR Coating Tempered Glass
Frame	Anodized aluminum alloy frame
Junction Box	IP68,2 diodes
Output Cable	TUV:4mm ² /UL:12AWG
Packaging	36pcs/pallet, 924pcs/40'HQ

Electrical Data (STC)

	420W	425W	430W	435W	440W
Maximum Power(Pmax)	420W	425W	430W	435W	440W
Maximum Power Voltage(Vmp)	34.50V	34.60V	34.70V	34.80V	34.90V
Maximum Power Current(Imp)	12.19A	12.30A	12.39A	12.50A	12.60A
Open-circuit Voltage(Voc)	41.60V	41.70V	41.80V	41.90V	42.00V
Short-circuit Current(Isc)	12.92A	13.03A	13.14A	13.26A	13.37A
Module Efficiency(%)	21.10%	21.40%	21.70%	21.90%	22.20%

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

Electrical Data (NOCT)

	316W	320W	324W	328W	332W
Maximum Power(Pmax)	316W	320W	324W	328W	332W
Maximum Power Voltage(Vmp)	32.90V	33.00V	33.10V	33.20V	33.30V
Maximum Power Current(Imp)	9.62A	9.70A	9.79A	9.88A	9.97A
Open-circuit Voltage(Voc)	39.70V	39.80V	39.90V	40.00V	40.10V
Short-circuit Current(Isc)	10.41A	10.50A	10.60A	10.71A	10.82A
Module Efficiency(%)	21.10%	21.40%	21.70%	21.90%	22.20%

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Temperature Ratings(STC)

Temperature Coefficient of Isc	+0.040%/°C
Temperature Coefficient of Voc	-0.270%/°C
Temperature Coefficient of Pmax	-0.340%/°C
NOCT (Nominal operating cell temperature)	42.3±2°C

Operating Parameters

Operating temperature(°C)	-40°C~+85°C
Maximum system voltage	1000/1500V DC(IEC)
Maximum series fuse rating	25A
Power tolerance	0-3%

Curve

