

SDN

SunDay 10+ N

Bifacial N-type Half-Cell Double-Glass Module

Sdm620-THBA-A1S

Sdm635-THBA-A1S

Sdm625-THBA-A1S

Sdm640-THBA-A1S

Sdm630-THBA-A1S



🌟 Optimum Customer Value



Maximum module efficiency

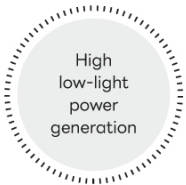
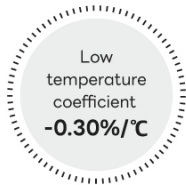
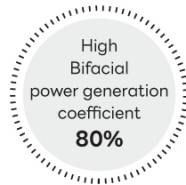
22.9%



Provides optimal LCOE

LCOE

📈 High Efficiency Characteristics



⚙️ High Durability

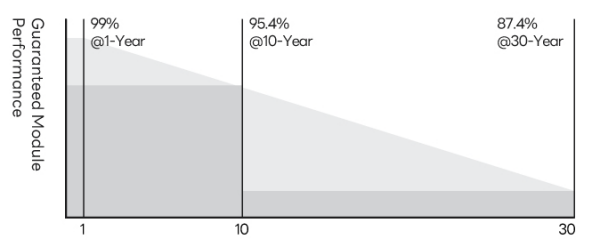
Application of high-durability bonding materials

Anti-PID technology

12-year Product Warranty/
30-year Power Output Warranty

Annual degradation under
0.4% per year

🛡️ Quality Assurance



12-year Product Warranty

30-year Power Output Warranty

620W | 625W | 630W | 635W | 640W

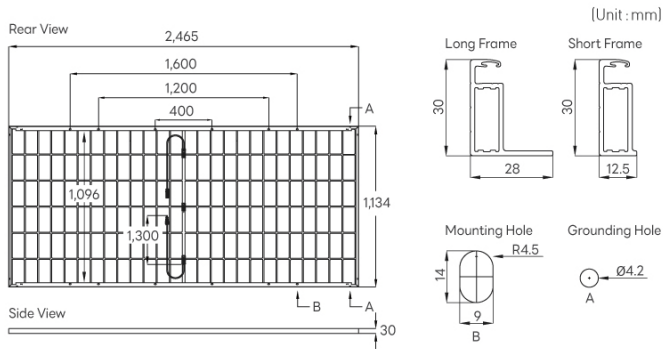
640W
OUTPUT

22.9%
EFFICIENCY

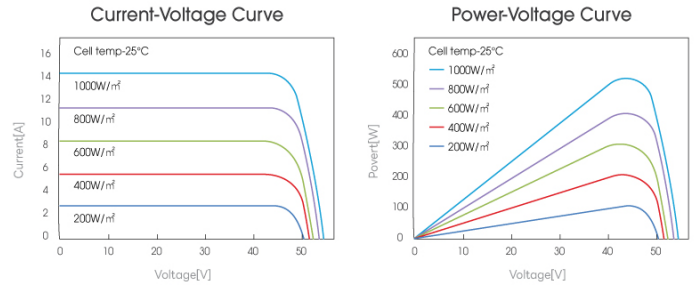
≤1%
FIRST-YEAR DEGRADATION

≤0.4%
ANNUAL DEGRADATION FROM YEAR 2-30

ENGINEERING DRAWINGS



IV CURVE BY ILLUMINANCE



MECHANICAL SPECIFICATIONS

| | | | |
|------------------|------------------------------------|----------------------|---|
| Solar Cells | TOPCon N-type / 182.2mm x 183.75mm | Connector | MC4 |
| Cell Orientation | 156(6x26) | Front Materials | 2.0mm, AR Coated Heat Strengthened Glass |
| Dimensions | 2,465mm x 1,134mm x 30mm | Back Materials | 2.0mm, Heat Strengthened Glass, White Pattern |
| Weight | 34kg | Encapsulant Material | EPE/EPE |
| Junction Box | IP68 with 3bypass diodes | Frame | Anodized Aluminum Alloy(Silver Color) |

ELECTRICAL CHARACTERISTICS

| STC ¹ | | | | | | BNPI ² | | | | | | | |
|-----------------------|-----|--------|-------|-------|-------|-------------------|-----------------------|-----|-------|-------|-------|-------|-------|
| Maximum Power | [W] | 620 | 625 | 630 | 635 | 640 | Maximum Power | [W] | 678 | 683 | 689 | 694 | 699 |
| Output Tolerance | [%] | 0 ~+5% | | | | | Module Efficiency | [%] | 24.25 | 24.43 | 24.65 | 24.83 | 25.01 |
| Module Efficiency | [%] | 22.18 | 22.36 | 22.54 | 22.72 | 22.90 | Open-Circuit Voltage | [V] | 56.81 | 56.97 | 57.18 | 57.32 | 57.47 |
| Open-Circuit Voltage | [V] | 56.79 | 56.92 | 57.04 | 57.20 | 57.33 | Short-Circuit Current | [A] | 15.13 | 15.21 | 15.26 | 15.33 | 15.40 |
| Short-Circuit Current | [A] | 13.74 | 13.80 | 13.87 | 13.93 | 13.99 | Max. Power Voltage | [V] | 47.49 | 47.68 | 47.84 | 48.01 | 48.15 |
| Max. Power Voltage | [V] | 47.38 | 47.57 | 47.72 | 47.87 | 48.03 | Max. Power Current | [A] | 14.28 | 14.34 | 14.41 | 14.47 | 14.53 |
| Max. Power Current | [A] | 13.09 | 13.14 | 13.21 | 13.28 | 13.34 | | | | | | | |

* STC¹ The intensity of radiation: Front: 1000W/m², Module temperature: 25 (°C), AM: 1.5

* BNPI² The intensity of radiation: Front: 1000W/m², Back: 135W/m², Module temperature: 25 (°C), AM: 1.5

SYSTEM PARAMETERS

| | |
|-------------------------|-------------|
| Operational Temperature | -40°C~+85°C |
| Max. System Voltage | DC 1500V |
| Max. Series Fuse Rating | 30A |

MECHANICAL LOADING

| | |
|-----------------------------------|---------|
| Front-Side Maximum Static Loading | 5400 Pa |
| Rear Side Maximum Static Loading | 2400 Pa |

TEMPERATURE RATINGS

| | |
|------------------------------------|--|
| Temperature Coefficient of Pmax | - 0.300%/°C |
| Temperature Coefficient of Voc | - 0.250%/°C |
| Temperature Coefficient of Isc | + 0.045%/°C |
| NOCT(Nominal Operating Cell Temp.) | 45±2°C |
| Double-sided Coefficient | φPmax : 80±10%, φVoc : 98±2%, φIsc : 80±10% |

WARRANTY

| | |
|-------------------------|----------|
| Product Warranty Period | 12 years |
| 1-Year Output Warranty | 99% |
| 10-Year Output Warranty | 95.4% |
| 30-Year Output Warranty | 87.4% |

※ Specifications included in this datasheet are subject to change without notice.
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