SONIKARA SOLAR MODULE

60 CELL POLYCRYSTALLINE MODULE

270-285W POWER OUTPUT RANGE

17.42% MAXIMUM MODULE EFFICIENCY

0 - +3% POSITIVE POWER TOLERANCE

Sonikara Solar, electrical specialists and creators of energy saving designs for residential, commercial and industrial applications. Sonikara solar panel manufacturing processes utilize the best quality materials available and industry-leading equipment from around the world. We stand behind our promise of quality workmanship in all of our solar products. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

Product Certificates

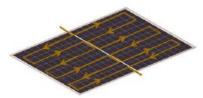
IEC/EN 61215, IEC/EN 61730



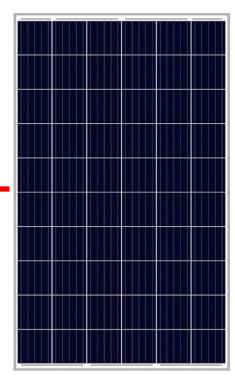
CAUTIONS: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.



Sonikara Solar www.sonikarasolar.com



Half-cut Cell Module Available



Our Most Versatile Product

- Compatible with all major BOS components and system designs
- Up to 1500Vpc system voltage

Maximum Limited Space

• Up to 174.2W/m² power density

Highly Reliable Due to Stringent Quality Control

- Over 30 in-house tests (UV, TC, HF, etc.)
- In-house testing goes well beyond certification requirements
- Fire Class A tested
- 100% EL double inspection

Severe Weather Resilience

- 2400Pa wind load
- 5400Pa snow load
- 35mm hail stones at 97km/h

Durability Against Extreme Environmental Conditions

• Salt mist corrosion tested, perfect for harsh climatic conditions

Linear Performance Warranty



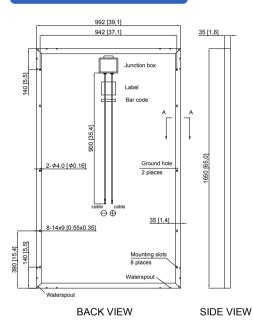
SSE Sonikara Solar Electro

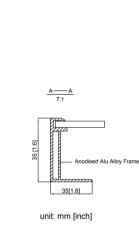
CL-SS280P-60 Series

Construction Materials

| Front Glass | 3.2mm, Low Iron, Tempered Glass | | | |
|------------------------|---------------------------------|--|--|--|
| Frame | Anodized Aluminum Alloy | | | |
| Junction Box | IP67 Rated | | | |
| Output Cables | TUV 1 × 4mm², Length: 900mm | | | |
| Connector | MC4 (IP67) | | | |
| Encapsulation Material | EVA | | | |
| Backsheet | ТРТ | | | |
| Fixing Adhesive | Silicone Sealant | | | |

Mechanical Diagrams





Mechanical Data

| Solar Cells | Poly 156.75mm × 156.75mm | | |
|-------------------|--------------------------|--|--|
| Number of Cells | 60Cells (6 × 10) | | |
| Module Dimensions | 1650mm × 992mm × 35mm | | |
| Weight | 18.2kg | | |

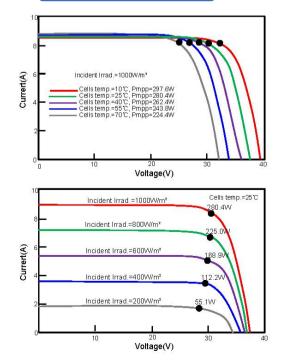
Temperature Coefficient

| Power Tolerance | 0 ~ +3% | | |
|---------------------------------|------------|--|--|
| Temperature Coefficient of Pmax | -0.40%/°C | | |
| Temperature Coefficient of Voc | -0.33%/°C | | |
| Temperature Coefficient of Isc | 0.058 %/°C | | |
| ΝΟΤΟ | (45 ± 2) ℃ | | |

Operating Conditions

| Max. System Voltage | 1500VDC (IEC) | | |
|--------------------------------|---------------|--|--|
| Max. System Fuse Rating | 15A | | |
| Operating Temperature | -40 ~ +85°C | | |
| Max. Static Load, Front (Snow) | 5400Pa | | |
| Max. Static Load, Back (Wind) | 2400Pa | | |

IV Curves



Electrical Parameters at STC

| Module type | CL-SS280P-60 Series | | | | | |
|--|---------------------|-------|-------|-------|--|--|
| Rated Maximum Power (Pmax/W) | 270 | 275 | 280 | 285 | | |
| Maximum Power Voltage (Vmp/V) | 30.95 | 31.29 | 31.63 | 31.79 | | |
| Open-circuit Voltage (Voc/V) | 38.30 | 38.46 | 38.62 | 38.80 | | |
| Maximum Power Current (Imp/A) | 8.72 | 8.78 | 8.85 | 8.97 | | |
| Short-circuit Current (Isc/A) | 9.16 | 9.22 | 9.28 | 9.36 | | |
| Module Efficiency (%) | 16.50 | 16.80 | 17.11 | 17.42 | | |
| STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5 | | | | | | |

Packaging Configuration

Pieces Per Carton: 2 | Pieces Per 20GP/40HQ: 312/840

nikara Solar <u>Electro</u>_____