

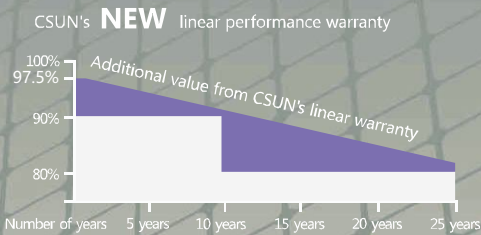
POLY



PowerGuard Insurance Global Coverage

The power output shall not be less than 97.5% of the minimum power output stated in the product data sheet in the first year of the product's life cycle. The loss of power output shall not exceed 0.68% per year thereafter, ending with 80.7% in the 25th year.

■ CSUN ■ Standard Warranty



CSUN285-60P

The Large Scale Project Solution

CSUN285-60P CSUN280-60P CSUN275-60P
CSUN270-60P CSUN265-60P

17.55%

Module efficiency

285W

Highest power output

10 years

Material & Workmanship warranty

25 years

Liner power output warranty



PID-free



World class poly efficiency



Tighter product performance distribution and current sorting reduces the mismatch power loss in system operation



Positive tolerance offer



Good temperature coefficient enables higher output in high temperature regions



Excellent performance under low light conditions



Certified for salt/ammonia corrosion resistance



Load certificates: wind to 2400Pa and snow to 5400Pa

- China Sunergy Co., Ltd. designs, manufactures and delivers high efficient solar cells and modules to the world from its production centers based in China, Turkey, South Korea and Vietnam.
- Founded in 2004, China Sunergy is well known for its advanced solar cell technology reliable product quality and excellent customer service.
- As one of leading PV enterprises, China Sunergy has delivered more than 4.0GW of solar products to residential, commercial, utility and off-grid projects all around the world.

- Note:
All specifications, warranties, certifications about module of "CSUN" series also apply to that of "SST".

All information and data are subject to change without notice.

Right 2017



Electrical characteristics at Standard Test Conditions(STC)

| Module Type | CSUN285-60P | CSUN280-60P | CSUN275-60P | CSUN270-60P | CSUN265-60P |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Maximum Power - Pmax (W) | 285 | 280 | 275 | 270 | 265 |
| Open Circuit Voltage - Voc (V) | 38.6 | 38.5 | 38.4 | 38.3 | 38.2 |
| Short Circuit Current - Isc (A) | 9.44 | 9.36 | 9.27 | 9.19 | 9.1 |
| Maximum Power Voltage - Vmpp (V) | 31.5 | 31.4 | 31.3 | 31.2 | 31 |
| Maximum Power Current - Impp (A) | 9.05 | 8.92 | 8.79 | 8.67 | 8.55 |
| Module Efficiency | 17.55% | 17.24% | 16.94% | 16.63% | 16.32% |

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1.5; module temperature 25°C. Tolerance of Pmp: 0~+3%.

Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Electrical Characteristics at Normal Operating Cell Temperature(NOCT)

| Module Type | CSUN285-60P | CSUN280-60P | CSUN275-60P | CSUN270-60P | CSUN265-60P |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|
| Maximum Power - Pmax (W) | 213 | 209 | 204 | 200 | 196 |
| Open Circuit Voltage - Voc (V) | 36.1 | 35.9 | 35.8 | 35.6 | 35.5 |
| Short Circuit Current - Isc (A) | 7.62 | 7.56 | 7.48 | 7.42 | 7.35 |
| Maximum Power Voltage - Vmpp (V) | 29.8 | 29.5 | 29.2 | 28.9 | 28.6 |
| Maximum Power Current - Impp (A) | 7.17 | 7.17 | 7.00 | 6.92 | 6.83 |

Normal Operating Cell Temperature(NOCT) : irradiance 800W/m²; wind speed 1 m/s ; cell temperature 45°C; ambient temperature 20°C.

Measuring uncertainty of power: ±3%. Certified in accordance with IEC 61215, IEC 61730-1/2 and UL 1703.

Temperature Characteristics

| | | | |
|---------------------------------|---------------|----------------------------|------|
| NOTC | 45°C (±2°C) | Maximum System Voltage [V] | 1000 |
| Voltage Temperature Coefficient | -0.292%/K | Series Fuse Rating [A] | 20 |
| Current Temperature Coefficient | +0.045%/K | | |
| Power Temperature Coefficient | -0.408%/K | | |

Maximum Ratings

Material Characteristics

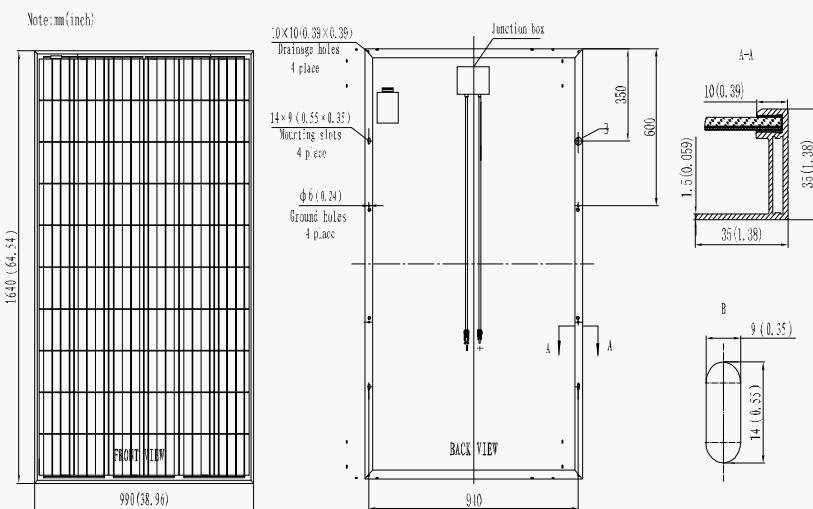
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|--------------------|--|
| Dimensions | 1640×990×35mm (L×W×H) |
| Weight | 18.3kg |
| Frame | Anodized aluminum profile |
| Front Glass | White toughened safety glass, 3.2 mm |
| Cell Encapsulation | EVA (Ethylene-Vinyl-Acetate) |
| Back Sheet | Composite film |
| Cells | 6×10 pieces monocrystalline solar cells series strings (156mm×156mm) |
| Junction Box | Rated current≥13A, IP≥67, TUV&UL |
| Cable&Connector | Length 900 mm, 1×4 mm ² , compatible film |

Packaging

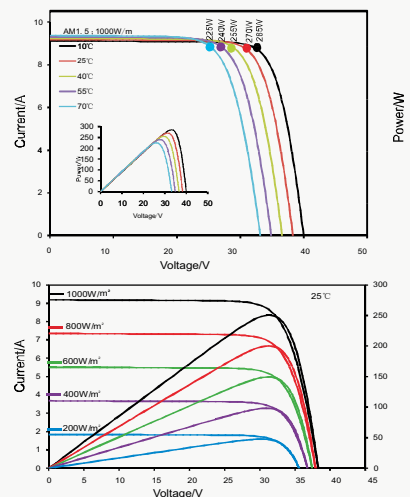
| | | | |
|-------------------|-----------------|-------------------|-------------------|
| Dimensions(L×W×H) | 1690×1120×112mm | Temperature Range | -40 °C to + 85 °C |
| Container20' | 360 | Withstanding Hail | Maximum diameter |
| Container40' | 840 | Maximum Surface | 5,400 Pa |
| Container40'HC | 896 | Application class | class A |
| | | Safety class | class II |

System Design

Dimensions



IV-Curves



Excellent performance under weak light condition.