

## GAME CHANGER

Sunflare Introduces Capture4 solar technology, the first high-precision, cell-by-cell manufacturing process for exceptional performance and durability. The environmentally cleanest method of massproducing solar panels in the world.

## MORE ELECTRICITY IN REAL-WORLD CONDITIONS

### Better at Dawn and Dusk

Sunflare delivers more energy than c-Si in low light condition.

### Better in Poor Weather

Cloudy days, fog, and high humidity, no problem.

### Won't Crack Under Pressure

Traditional cells are made with silicon, which is brittle. Flexing creates cracking in the cell. These cracks reduce the energy output over time. Sunflare has a flexible stainless steel substrate with a mere micron of chemical the combination eliminates micro-cracking.

### Easy Installation

Fast and low cost installation. Adheres with best quality double sided tape and no roof penetrations.

### Shading

Sunflare modules have bypass diodes on each individual cell. This means that when a cell is being shaded, only that individual cell will be inactive. Therefore, the power output of the module will be proportional to the amount of the module being shaded, i.e. if half of the module is shaded, you should expect half of the rated power output.

## GUARANTEED RELIABILITY FOR 25 YEARS

90% efficiency output for first 10 years  
80% efficiency output 11-25 years



### Lightweight

75% lighter than c-Si panels.



### Thin

95% thinner than c-Si panels.



### Flexible

The .127mm stainless steel substrate allows for generous curvature.



### Durable

Withstands high impact. Impervious to heat, wind and cold. Will not crack.

## ELECTRICAL DATA

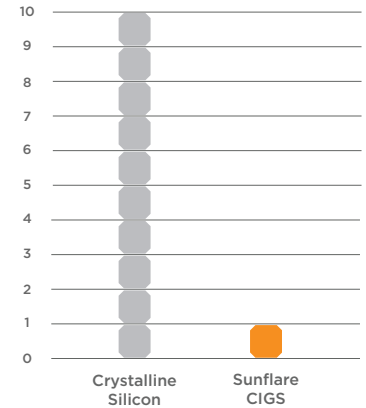
### Standard Test Conditions:

|                                 |        |              |       |       |       |       |
|---------------------------------|--------|--------------|-------|-------|-------|-------|
| Peak Power (+3/-3%)             | Pmax   | 165W         | 170W  | 175W  | 180W  | 185W  |
| Aperture Efficiency             |        | 13.3%        | 13.7% | 14.1% | 14.5% | 15.0% |
| Peak Power Voltage              | Vmpp   | 27.5V        | 27.4V | 28.2V | 28.7V | 28.3V |
| Peak Power Current              | Impp   | 6.0A         | 6.2A  | 6.2A  | 6.3A  | 6.5A  |
| Open Circuit Voltage            | Voc    | 35.4V        | 35.7V | 36.0V | 36.4V | 36.6V |
| Short Circuit Current           | Isc    | 7.3A         | 7.4A  | 7.4A  | 7.4A  | 7.5A  |
| Maximum System Voltage          | UL/IEC | 1000V        |       |       |       |       |
| Temperature Coefficient Power   |        | -0.35 %/°C   |       |       |       |       |
| Temperature Coefficient Voltage |        | -0.25 %/°C   |       |       |       |       |
| Temperature Coefficient Current |        | +0.03%/°C    |       |       |       |       |
| NOCT                            |        | 52.1°C       |       |       |       |       |
| Series Fuse Rating              |        | 12A          |       |       |       |       |
| Grounding                       |        | Not Required |       |       |       |       |

\*Irradiance of 1000W/mxm, AM 1.5 and cell temperature 25 degree C

### Environmentally Cleanest

1/10 Carbon Footprint of Silicon modules



Source: Life cycle assessment of CIGS solar modules and future integration in Zbee 2017-12-18 Sandra Roos, Magdalena Juntikka. Study reviewed and approved by Swedish independent third-party institute Miljögraff AB.

## MECHANICAL DATA

|                     |                       |
|---------------------|-----------------------|
| Solar Cells         | SUN <sup>2</sup> CIGS |
| Junction Box        | IP-65, MC4 compatible |
| Frame               | No frame              |
| Weight              | 5kg (11 lbs)          |
| Hot Spot Protection | Bypass diode per cell |
| Top Sheet Material  | ETFE                  |
| Wind Up-Force Load  | 110lb/sf              |

Module Thickness

1.7 mm

Temperature F ( C )

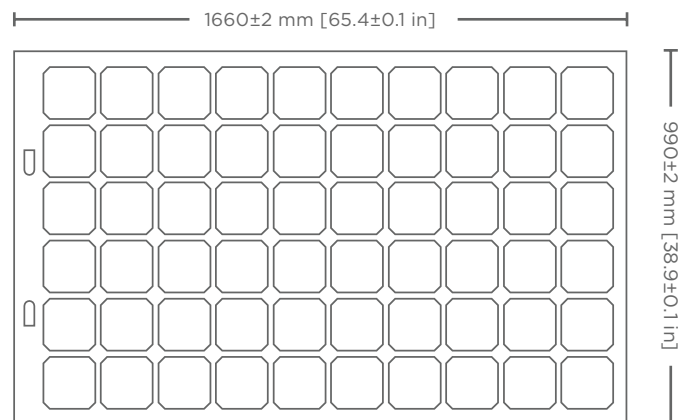
-40° F to + 185° F (-40°C to +85°C)

Impact Resistance

25mm (1 in) diameter hail at  
52 mph (23 m/s)

## MODULE SPECS

### Module Dimension



## TESTS AND CERTIFICATIONS

|                         |                                    |
|-------------------------|------------------------------------|
| Standard Tests          | UL 1703<br>IEC 61215,<br>IEC 61730 |
| Management System Certs | ISO 9001:2015,<br>ISO 14001:2015   |