



Circle Park Industries  
(888) CPI-0211  
Frisco Texas



## SOLAR MODULES

### Features & Performance

Our PV modules have been certified by ISO9001, ISO14001, OHSAS18001 etc. As a leading PV manufacturer our prioritized goal is to keep developing and producing high quality and high efficiency modules.

**Maximum Power:** 315Wp  
**Module Efficiency:** 16.32%  
**Product Warranty:** 10 years  
**Power Warranty:** 10 years  $\geq 90\%$   
25 years  $\geq 80\%$

ST72P315 /310/305  
ST72P300/295/290  
ST72P285/280

#### Mechanical Property

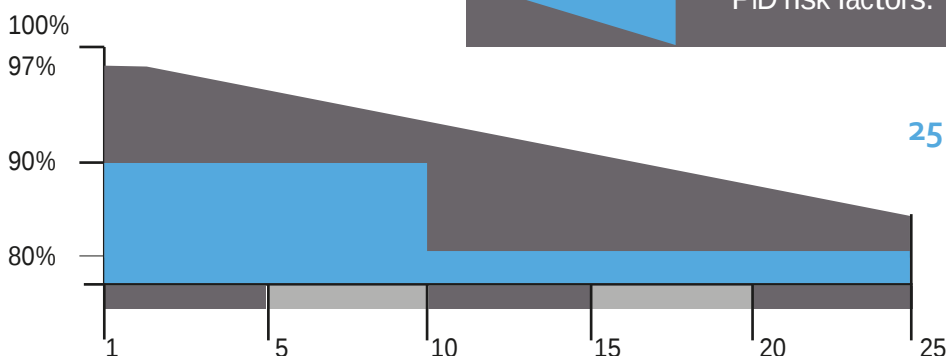
- Snow loads up to 5400Pa
- Wind loads up to 2400Pa

#### Low Light Performance

- Excellent performance under low light (morning, evening and cloudy days)

#### High Durability

- Durable PV modules, independently tested for harsh environmental conditions, such as exposure to salt mist, ammonia and known PID risk factors.



25 Years Linear Warranty

## Electrical Performance (STC : AM 1.5, 1000W/m<sup>2</sup>, 25°C)

| Module Type                   | ST72P315 | ST72P310 | ST72P305 | ST72P300 | ST72P295 | ST72P290 | ST72P285 | ST72P280 |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum Power (Pmax/W)        | 315      | 310      | 305      | 300      | 295      | 290      | 285      | 280      |
| Power Tolerance               | 0~+3%    |          |          |          |          |          |          |          |
| Maximum Power Voltage (Vm/V)  | 37.5     | 37.2     | 37.0     | 36.8     | 36.7     | 36.6     | 36.5     | 36.2     |
| Maximum Power Current (Im/A)  | 8.42     | 8.36     | 8.25     | 8.17     | 8.06     | 7.95     | 7.82     | 7.76     |
| Open Circuit Voltage (Voc/V)  | 45.3     | 45.2     | 45.1     | 44.8     | 44.7     | 44.6     | 44.4     | 44.3     |
| Short Circuit Current (Isc/A) | 8.9      | 8.84     | 8.72     | 8.68     | 8.61     | 8.57     | 8.47     | 8.43     |
| Module Efficiency (%)         | 16.32    | 16.06    | 15.80    | 15.54    | 15.28    | 15.02    | 14.76    | 14.5     |

## Electrical Performance (NOCT : wind speed 1m/s, 800W/m<sup>2</sup>, 20°C)

| Module Type                   | ST72P315 | ST72P310 | ST72P305 | ST72P300 | ST72P295 | ST72P290 | ST72P285 | ST72P280 |
|-------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Maximum Power (Pmax/W)        | 230      | 226      | 224      | 220      | 215      | 212      | 207      | 204      |
| Maximum Power Voltage (Vm/V)  | 34.1     | 33.9     | 33.8     | 33.6     | 33.3     | 33.2     | 33.1     | 32.8     |
| Maximum Power Current (Im/A)  | 6.74     | 6.68     | 6.61     | 6.54     | 6.47     | 6.38     | 6.27     | 6.23     |
| Open Circuit Voltage (Voc/V)  | 41.6     | 41.5     | 41.4     | 41.3     | 41.1     | 41.0     | 40.9     | 40.7     |
| Short Circuit Current (Isc/A) | 7.19     | 7.14     | 7.05     | 7.02     | 6.95     | 6.93     | 6.85     | 6.81     |

## Mechanical Properties

|                       |                           |                                   |                      |
|-----------------------|---------------------------|-----------------------------------|----------------------|
| Dimensions (L×W×H/mm) | 1950×990×45               | Maximum System Voltage (VDC)      | 1000(IEC) / 600 (UL) |
| Weight (Kgs)          | 25.8                      | Maximum Series Fuse Rating (A)    | 15                   |
| Solar Cells           | Polycrystalline 156×156mm | Operating Module Temperature (°C) | -40 to +85           |
| No. of Cells          | 72 (6×12)                 |                                   |                      |

## Operation Conditions

|              |                                  |                                   |             |
|--------------|----------------------------------|-----------------------------------|-------------|
| Glass        | 3.2mm low-iron tempered glass    | Temperature Properties            |             |
| Frame        | Anodized aluminum alloy          | Normal Operating Cell Temperature | 45±2°C      |
| Junction box | IP 65 above, 6 bypass diodes     | Temperature Coefficient of Pm     | -0.4 %/°C   |
| Cables       | 4mm <sup>2</sup> , length 1100mm | Temperature Coefficient of Voc    | -0.346 %/°C |
| Connectors   | IP67, MC4 compatible             | Temperature Coefficient of Isc    | +0.046 %/°C |

## System Design

|                              |                   |                       |      |       |
|------------------------------|-------------------|-----------------------|------|-------|
| Hail safety impact velocity  | D 25mm at 23 mm/s | Container Sizes       | 20GP | 40HC  |
| Static Load (Front/Back)     | 5400Pa/2400Pa     | Pieces per pallet     | 22   | 22/27 |
| Application class            | Class A           | Pallets per Container | 10   | 11+11 |
| Fire safety class (IEC61730) | Class C           | Total pieces          | 220  | 539   |

## Packing Configuration

