

# ASUN290-M



## 290W Monocrystalline Photovoltaic Module

FULL  
QMS

### Quality Management System

- ✓ Raw material and module traceability
- ✓ Control of raw material
- ✓ Products manufacturing control
- ✓ Finished products inspection



- ✓ 100% finished modules flashed
- ✓ Flash report provided to customer
- ✓ 100% electroluminescence test

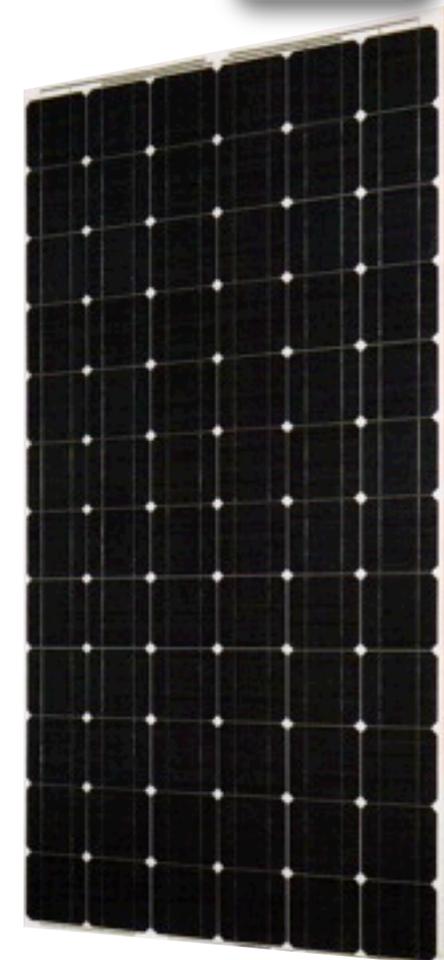


- ✓ 10-year material warranty
- ✓ Power output warranty:
  - 95% of the power on 5 years
  - 90% of the power on 12 years
  - 85% of the power on 18 years
  - 80% of the power on 25 years



- ✓ Error and Omission Insurance (Chubb Group): cover the economic loss sustained due to operational defects or performance failures

149W/m<sup>2</sup>



Clean Energy Council



Factory certified

Certification  
IEC61215 & IEC61730

# Technical

## Electrical Data

|                             |        |
|-----------------------------|--------|
| Maximum Power (Pmax)        | 290W   |
| Tolerance                   | +/- 2% |
| Maximum Power Voltage (Vpm) | 35.65V |
| Maximum Power Current (Ipm) | 8.14A  |
| Open Circuit Voltage (Voc)  | 43.85V |
| Short Circuit Current (Isc) | 8.79A  |
| Cell efficiency             | 17.35% |
| Module efficiency           | 14.9%  |
| Maximum System Voltage      | 1000V  |

STC: irradiation 1000W/m2, AM 1,5 and temperature 25°C

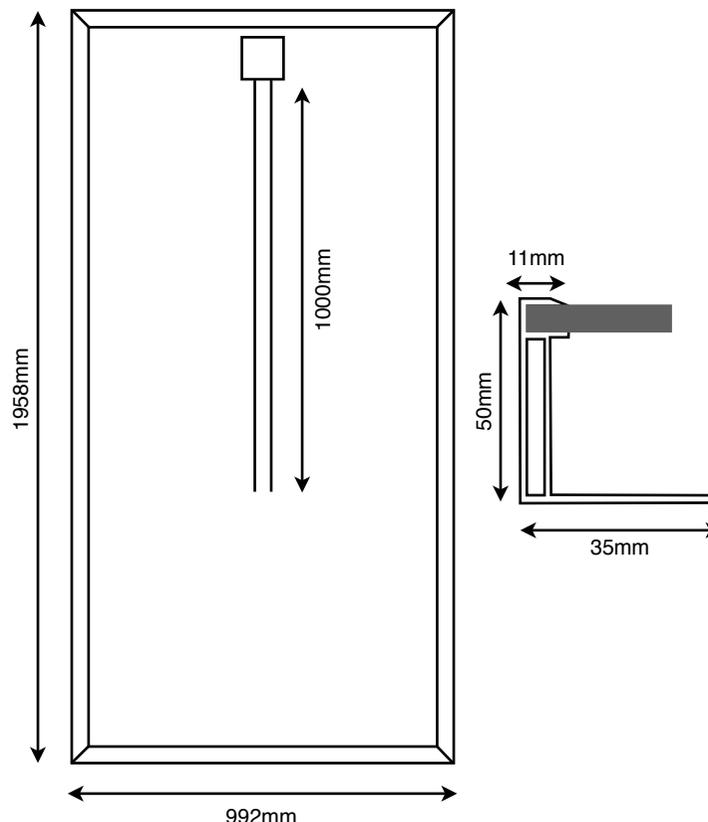
## Performance at 800W/m2

|                             |        |
|-----------------------------|--------|
| Maximum Power Voltage (Vpm) | 35.54V |
| Maximum Power Current (Ipm) | 6.50A  |

NOCT, 800W/m2, AM 1,5 and 25°C

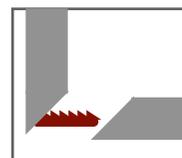
## Temperature Coefficient

|                           |            |
|---------------------------|------------|
| NOCT                      | 45°C +/-2% |
| Voltage Temperature (Voc) | -0.37%/°C  |
| Current Temperature (Isc) | +0.031%/°C |
| Power Temperature (Pm)    | - 0.53%/°C |



## Mechanical Data

|                        |                           |
|------------------------|---------------------------|
| Number of Cells        | 72 (6 x 12)               |
| Cell Dimension         | 156*156mm                 |
| Bypass diodes          | 6                         |
| Glass Thickness        | 3.2mm                     |
| Maximum Load           | 5400Pa                    |
| Weight                 | 23.2Kg                    |
| Dimensions             | 1958*992*50mm             |
| Cable length / section | 1000mm / 4mm <sup>2</sup> |
| Connectors             | MC4 compatible            |
| Operating Temperature  | -40°C to +85°C            |



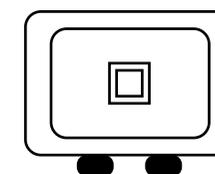
### Frame

Built-in aluminium angle makes the frame stronger and reliable on long-term. Angle is set inside the frame cavity.



### Back sheet

- Improved aesthetic appearance
- Anti-UV and Anti-Yellowing
- Ultimate moisture barrier
- Proven durability



### Junction box

- IP65
- Fire resistance
- Excellent electrical insulation of components
- Stability and flexibility over a wide temperature range