# ASUN190-MB

A-SUN

## *190W Monocrystalline Photovoltaic Black 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

- ✓ 10-year material warranty
- ✓ Power output warranty:
  - 90% of the power on 10 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

IEC

CE

DVE

MCS

BBA BRITISH BOARD OF AGRÉMENT

ISO

Factory certified

**148.8W/m²**

Certification:

- ✓ MCS
- ✓ IEC61215 & IEC61730

# Technical

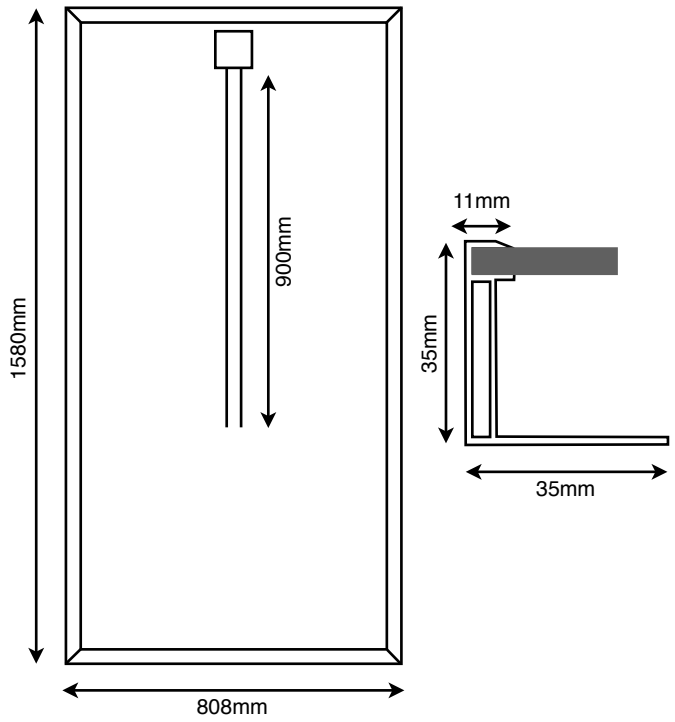
| Electrical Data | |
|---|---|
| Maximum Power (Pmax) | 190W |
| Tolerance | +/- 2% |
| Maximum Power Voltage (Vpm) | 36.2V |
| Maximum Power Current (Ipm) | 5.39A |
| Open Circuit Voltage (Voc) | 44.82V |
| Short Circuit Current (Isc) | 5.79A |
| Cells efficiency | 18.0% |
| Module efficiency | 15.3% |
| Maximum System Voltage | 1000V |

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

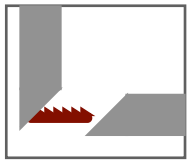
| Performance at 800W/m2 | |
|---|---|
| Maximum Power Voltage (Vpm) | 35.87V |
| Maximum Power Current (Ipm) | 4.31A |

**NOCT, 800W/m2, AM 1,5 and 25°C**

| Temperature Coefficient | |
|---|---|
| NOCT | 45°C +/-2% |
| Voltage Temperature (Voc) | -0.35%/°C |
| Current Temperature (Isc) | +0.038 %/°C |
| Power Temperature (Pm) | - 0.49%/°C |




| Mechanical Data | |
|---|---|
| Number of Cells | 72 (3 x 24 series) |
| Cell Dimension | 125*125mm, ⌀ 165mm |
| Bypass diodes | 3 (12A) |
| Glass Thickness | 3.2mm |
| Maximum Load | 5400Pa |
| Weight | 15.5Kg |
| Dimensions | 1580*808*35mm |
| Cable length / section | 900mm / 4mm² |
| Connectors | MC4 compatible |
| Operating Temperature | -40°C to +85°C |

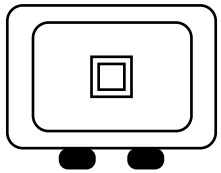


**Frame**

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