



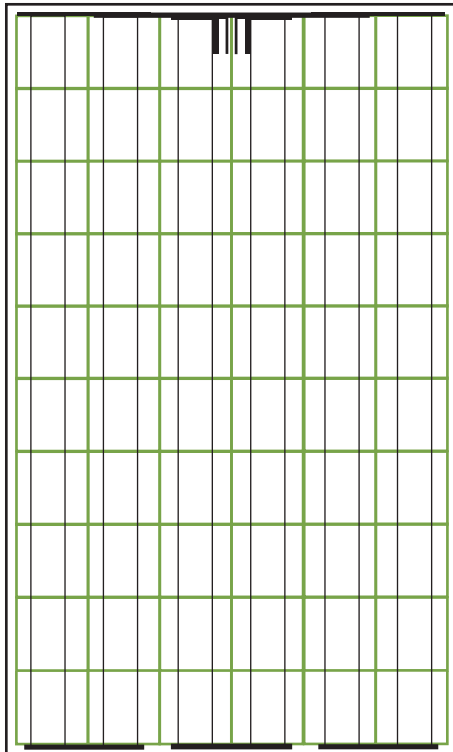
**invensun**  
change the world

**sundragon™ i230-60P**

**Hazardous Grade C1D2**  
Poly-crystalline Solar Modules

Model Name **i230-60P**

*Hazardous Area Protection*  
Class 1 Division 2, Groups A, B, C, D  
Temperature Classification T4



**230W**

Safe for use in hazardous locations where explosive gases, vapors and liquids may be present.

- Gas wellheads
- Gas pipelines
- Tank Farms
- Oil refineries
- Offshore oil platforms
- Air monitoring
- Monitoring/SCADA
- Wireless Data
- Gas Detection
- Cathodic Protection
- Mining
- Telecom
- Industrial Electrical Applications
- Security
- Obstruction Lighting
- Traffic

**Warranty**

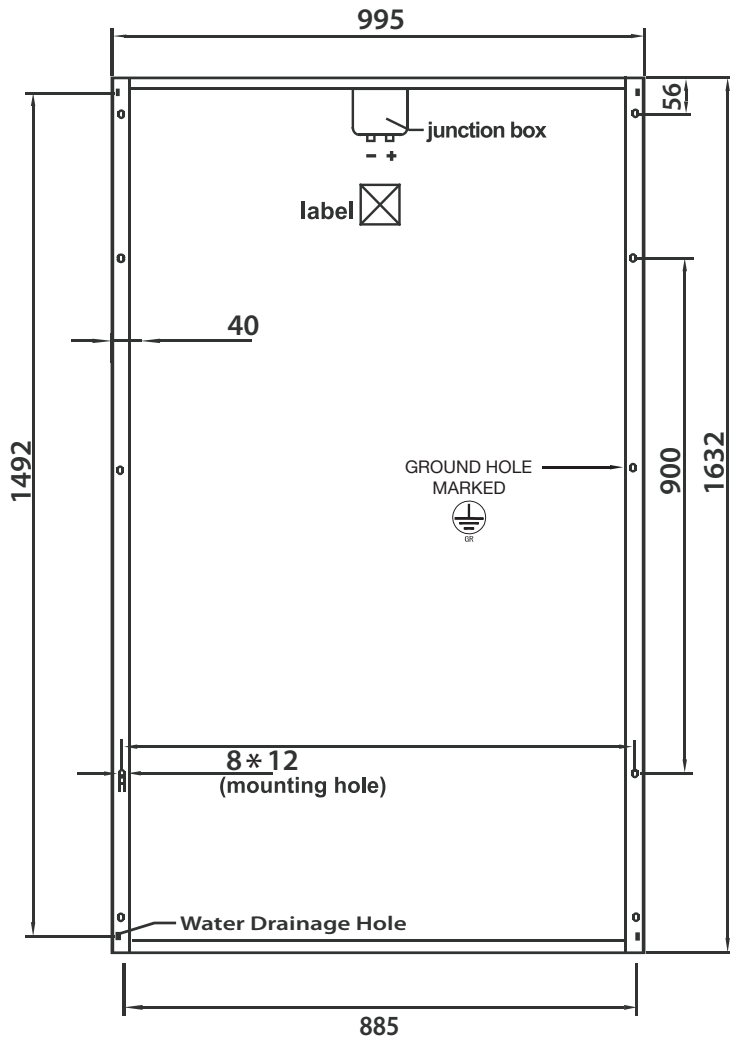
Product Workmanship	5 years
10 Years	90% output
25 Years	80% output

**Environmental Characteristics**

Mechanical Load	5400 Pa
Fire Rating	Class C
Operating Temperature	-40 to +85 °C

ISO 9001 compliant manufacturing facility

**Hazardous Grade C1D2**  
Poly-crystalline Solar Modules



**230W**

## Parameters

### Electrical Characteristics

Maximum Power at STC (Pmax)	230W
Optimum Operating Voltage (Vmp)	30.36V
Optimum Operating Current (Imp)	7.58A
Open Circuit Voltage (Voc)	36.42V
Short Circuit Current (Isc)	8.10A
Maximum System Voltage	DC 600V
Maximum Series Fuse Rating	15A
Power Tolerance	±5%

### Temperature Coefficients

Nominal Operating Cell Temperature	46°C, ±2°C
Maximum Power (Pmax) Coefficient	-0.45%/°C, ±0.05
Short Circuit Current (Isc) Coefficient	-0.6%/°C, ±0.015
Open Circuit Current (Voc) Coefficient	-0.35%/°C, ±0.05

### Mechanical Characteristics

Solar Cell Type	Polycrystalline Silicon
Solar Cell Size	156mm x 156mm
Number of Solar Cells	60
Junction Box	IP-65 rated
Cables	N/A
Connectors	N/A
Diode	3 bypass diodes
Front Glass	3.2mm tempered glass
Frame	Anodized Aluminum Alloy
Dimensions L x W x D	1632 x 995 x 50 mm
Weight	20.0kg



Standard Test Conditions (STC)

STC = 1000 W/M<sup>2</sup> irradiance, 25°C module temperature,

AM1.5 spectrum (Subject to simulator measurement uncertainty of ±3%)