

# Ex Solar Panel SPA-130A



**ATEX** 



The SPA 130A Photo Voltaic Solar Panel is a Zone 1 ATEX Ex mb e certified product. The cells of the panel are encapsulated between a tempered glass cover and are EVA pottant - with an aluminium polyester protected back sheet to provide maximum protection in the most extreme environmental conditions.

Typical applications for this new energy & cost saving concept are; to monitor remote pipelines and unmanned offshore oil & gas installations where the location and the proximity of a hazardous area, deems conventional power sources and manpower to be less economical.

Complimented by other JCE Group products such as: hazardous area batteries and EExd control enclosures, the SPA 130A can be supplied as part of a complete control and monitoring system.

Combined with a compatible inverter housed in our EJB range of EExd enclosures, it is suitable for AC applications.

#### **Materials and Finish**

Aluminium mounting frame. Terminal enclosure made of GRP with 2 Exe ATEX M25 glands.

#### **Earthing**

All panels are supplied with 6mm stainless steel earth studs.

## **Ratings and Approvals**

Categories -



**Codes -** Ex mb e II T5

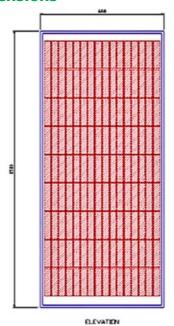
**Protection Grade - IP66** 

**Certificate Nos -** ISSeP08ATEX052X

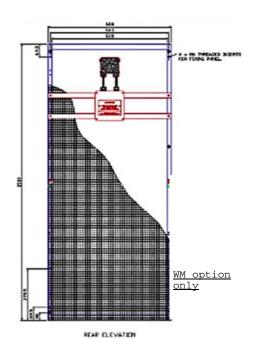
**Temperature** - -20°C to +40°C

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## **Dimensions**







## **Technical Data**

| ELECTRICAL PERFORMANCE                                       |        |         |  |  |
|--|--------|---------|--|--|
| At 1000 W/m <sup>2</sup> (STC)*                              |        |         |  |  |
| Maximum Power  | [W]    | 135     |  |  |
| Maximum System Voltage                                       | [V]    | 1000    |  |  |
| Maximum Power Voltage  | [V]    | 17.7    |  |  |
| Maximum Power Current  | [A]    | 7.63    |  |  |
| Open Circuit Voltage (Voc)                                   | [V]    | 22.1    |  |  |
| Short Circuit Current (Isc)                                  | [A]    | 8.37    |  |  |
| At 800 W/m²(NOCT)**  |        |         |  |  |
| Maximum Power  | [W]    | 95      |  |  |
| Maximum Power Voltage  | [V]    | 15.6    |  |  |
| Maximum Power Current  | [A]    | 6.1     |  |  |
| Open Circuit Voltage (Voc)                                   | [V]    | 19.9    |  |  |
| Short Circuit Current (Isc)                                  | [A]    | 6.82    |  |  |
| NOCT   | [°C]   | 49      |  |  |
| Power Tolerance  | [%]    | +5/-5   |  |  |
| Maximum Reverse Current IR                                   | [A]    | 15      |  |  |
| Series Fuse Rating   | [A]    | 15      |  |  |
| Temperature Coefficient of Voc                               | [V/°C] | -0.08   |  |  |
| Temperature Coefficient of Isc                               | [A/°C] | 0.00501 |  |  |
| Temperature Coefficient of Max. Power                        | [W/°C] | -0.614  |  |  |
| Reduction Of Efficiency (from 1000W/ $m^2$ to 200 W/ $m^2$ ) | [%]    | 5.8     |  |  |

| DIMENSIONS                |      |                |
|---------------------------|------|----------------|
| Length                    | [mm] | 1500 (+/-2.5)  |
| Width                     | [mm] | 668 (+/-2.5)   |
| Depth/ incl. Junction Box | [mm] | 136            |
| Weight                    | [kg] | 19             |
| Junction Box              | [mm] | 160 x 160 x 92 |
| IP Code                   |      | IP66           |

| CELLS               |      |                 |
|---------------------|------|-----------------|
| Number per Module   |      | 36              |
| Cell Technology     |      | Polycrystalline |
| Cell Shape (Square) | [mm] | 156 x 156       |
| Cell Bonding        |      | 3 busbar        |

| ORDER CODE |  |
|------------|--|
| SPA-130A   | This option can be adopted if the panel is installed in areas at low risk of mechanical damage.  |
| SPA-130AWM | This option must be adopted if the panel, after installation, does not have adequate physical or mechanical protection from risk of impact to the rear of the panel. |



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 $<sup>^\</sup>star$  Electrical values under standard test conditions(STC): irrediation of 1000 W/m², airmass AM 1.5 and all temperature of 25  $^\circ\text{C}$ 

 $<sup>^{\</sup>star\star}$  Electrical values under normal operating all temperature (NOCT):irrediation of 800 W/m², airmass AM 1.5 wind speed os 1m/s and ambient temperature of 20  $^{\circ}$  C

 $<sup>^{\</sup>star\star\star}$  10 year or 90% of the minimally specified power P under standard test conditions (STC)

<sup>\*\*\*\* 20</sup> years on 80% of the minimally specified power P under standard test conditions (STC)  $\,$