

# **Ex Solar Panel SPA-130A**

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 -	<b>⟨€x⟩</b>    2 G
Codes -	Ex mb e II T5
Protection Grade -	IP66
Certificate Nos -	ISSeP08ATEX052X

## **Dimensions**



# **Technical Data**

#### ELECTRICAL PERFORMANCE

At 1000 W/m <sup>2</sup> (STC)*			DIMENSIONS		
Maximum Power	[W]	135			
Maximum System Voltage	[V]	1000	Length	[mm]	1500 (+/-2.5)
Maximum Power Voltage	[V]	17.7	Width	[mm]	668 (+/-2.5)
Maximum Power Current	[A]	763	Depth/ incl. Junction Box	[mm]	136
Open Circuit Voltage (Voc)	[V]	22.1	Weight	[kg]	19
Short Circuit Current (Isc)	[A]	8.37	Junction Box	[mm]	160 x 160 x 92
At 800 W/m <sup>2</sup> (NOCT)**			IP Code		IP66
Maximum Power	[W]	95			
Maximum Power Voltage	[V]	15.6	CELLS		
Maximum Power Current	[A]	6.1			
Open Circuit Voltage (Voc)	[V]	19.9	Number per Module		36
Short Circuit Current (Isc)	[A]	6.82	Cell Technology		Polycrystalline
NOCT	[°C]	49	Cell Shape (Square) Cell Bonding	[mm]	156 x 156 3 busbar
Power Tolerance	[%]	5/-5	-		
Maximum Reverse Current IR	[A]	15	CERTIFICATION		
Series Fuse Rating	[A]	15			
Temperture Coefficient of Voc	[V/°C]	-0.08	Ex Protection		Ex mb e II T5
Temperture Coefficient of Isc	[A/°C]	0.00501	Certification No.	]	ISSep08ATEX052X
Temperture Coefficient of Max. Power	[W/°C]	-0.614			
Reduction Of Efficiency (from 1000W/m <sup>2</sup> to 200 W/m <sup>2</sup> )	[%]	5.8			

\* Electrical values under standard test conditions(STC): irrediation of 1000 W/m<sup>2</sup>, airmass AM 1.5 and all temperature of 25 °C

- \*\* Electrical values under normal operating all temperature (NOCT): irrediation of 800 W/m<sup>2</sup>, airmass AM 1.5 wind speed os 1m/s and ambient temperature of 20 °C
- \*\*\* 10 year or 90% of the minimally specified power P under standard test conditions (STC)

\*\*\*\* 20 years on 80% of the minimally specified power P under standard test conditions (STC)