

# SPA 130A, Ex mb e II T5, Solar Panel



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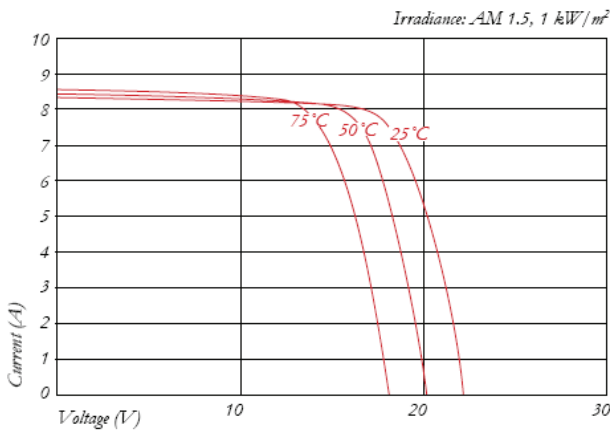
The SPA 130A photo voltaic Solar Panel is a ATEX Ex mb e certified product. The cells of the panel are encapsulated between a tempered glass cover and EVA pottant with an aluminium polyester protected back sheet to provide maximum protection in the most extreme environmental conditions.

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

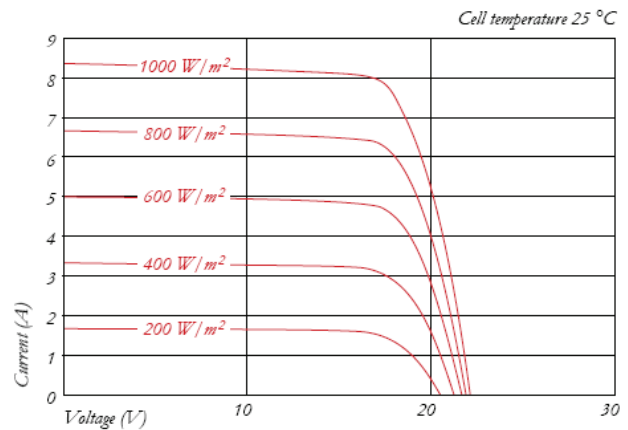
Complimented by other JCE Group products like hazardous area batteries and EExd control enclosures, the SPA 130A can be supplied as part of a complete control and monitoring system. Combined with a compatible inverter housed in our EJB range of EExd enclosures, it is suitable for AC applications.

## ELECTRICAL CHARACTERISTICS

Current-Voltage characteristics at various cell temperatures



Current-Voltage characteristics at various irradiance levels



### 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.

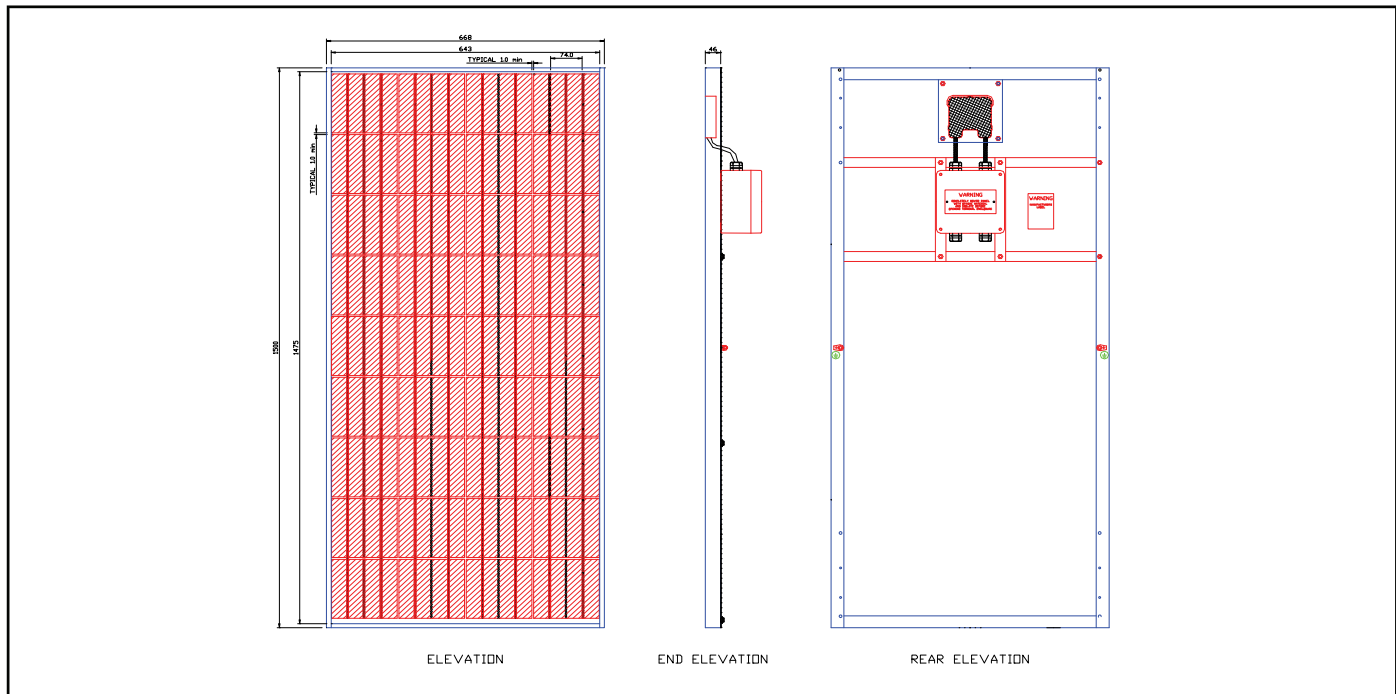
### Protection Grade

The terminal enclosure provides Ingress protection to IP66.

### Certification

ISSeP08ATEX052X

## 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/m<sup>2</sup>(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 <sup>2</sup> to 200 W/m <sup>2</sup> )	[%]	5.8

### DIMENSIONS

Length	[mm]	1500 (+/-2.5)
Width	[mm]	668 (+/-2.5)
Depth/ incl. Junction Box	[mm]	136
Weight	[kg]	14
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

### CERTIFICATION

Ex Protection		Ex mb e II T5
Certificate No.		ISSep08ATEX052X



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\* Electrical values under standard test conditions(STC): irradiation 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): irradiation of 800 W/m<sup>2</sup>, airmass AM 1.5 wind speed on 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)