



Ex Solar Panel SPA-230



ATEX



The SPA 230 photo voltaic Solar Panel is a Zone 2 ATEX Ex ec mc certified product for hazardous area applications. The cells of the panel are encapsulated between a tempered glass cover and are EVA pottant - 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 Ex d control enclosures, the SPA 230 can be supplied as part of a complete control and monitoring system.

Combined with a compatible inverter housed in our Ex ec enclosures, it is suitable for AC applications.


Materials and Finish

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

Earthing

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

Ratings and Approvals

Categories -  II 3 G

Codes - Ex ec mc IIC T4 Gc

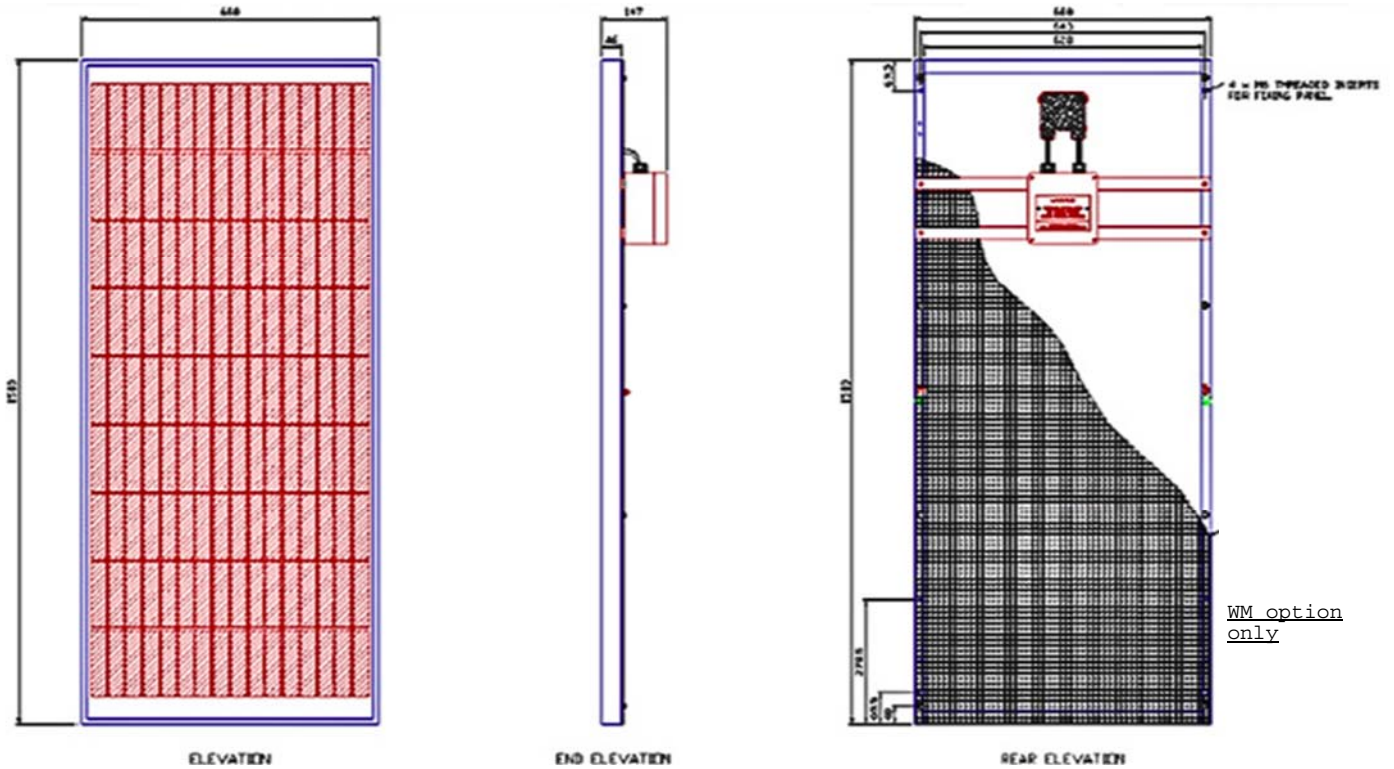
Protection Grade - IP66

Certificate Nos - ITS18ATEX403028X
IECEX ITS 18.000X

Temperature - -20°C to +50°C

JCE Energy

Dimensions



ELECTRICAL PERFORMANCE		
At 1000 W/m²(STC)*		
Maximum Power	[W]	140
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
Temperture Coefficient of Voc	[V/°C]	-0.08
Temperture Coefficient of Isc	[A/°C]	0.00501
Temperture 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]	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

ORDER CODE	
SPA-230	This option can be adopted if the panel is installed in areas at low
SPA-230WM	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.

* Electrical values under standard test conditions(STC): irradiation of 1000 W/m², airmass AM 1.5 and all temperature of 25 °C

** Electrical values under normal operating all temperature (NOCT): irradiation of 800 W/m², 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 stand-ard test conditions (STC)



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