

Technical Specifications



Specifications	ECE12CP100	
Power (Pm) in Watts (nominal)	100	
Open Circuit Voltage (Voc) in Volts	22.68	
Short Circuit Current (Isc) in Amps	5.6	
Voltage at Max Power (Vmp) in Volts	19.37	
Current at Max Power (Imp) in Amps	5.2	
Cell Efficiency (%)	18.6	
Module Fill Factor (%)	78.8	
Module Efficiency (%)	15.6	
Maximum System Voltage (Vdc)	1000	
Solar Cells per Module (Units) & Module Matrix	36	9*4
No. of Cells per bypass Diode	18	
Diode used detail	10A6/6A6	
Max Series Fuse Rating in Amps	6	

*All electrical parameters specified at STC: 25°C cell temperature; 1000W/M² irradiance; AM 1.5

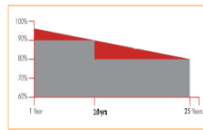
Temp. Coefficient Tc

Tc of Open Circuit Voltage (β)	-0.31%/°c ± 0.02
Tc of Short Circuit Voltage (α)	0.057%/°c ± 0.01
Tc of Power (γ)	-0.41%/°c ± 0.02
NOCT	45±2°c

Performance Warranty

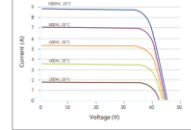
05 years Product Warranty
 12 years – 90% of Power
 25 Years – 80% of power

Performance Warranty

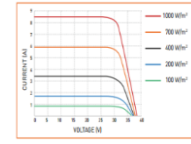


I-V Curve at STC

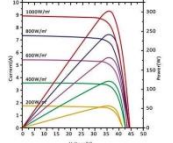
I-V CURVE



IV Curves



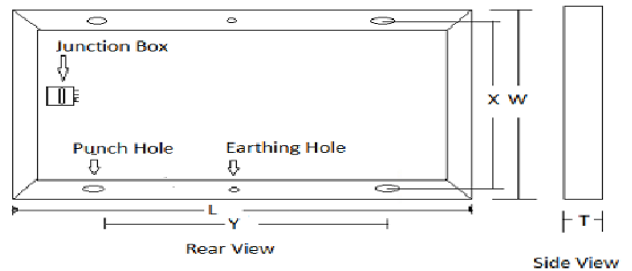
Electrical characteristics at different irradiances (STC)



Mechanical Details

Solar Cells Type	Polycrystalline solar cells -5 BB
Solar Glass	3.2 mm High transmission low iron tempered glass AR coated
Module Length (L)x Width(W) x Height(T)	1017mmx670mmx30mm (± 1.5 mm)
Area	0.67165 SQM
Mounting Hole Pitch (Y)	500 mm(± 4 mm)
Mounting Hole Pitch (X)	634 mm(± 4 mm)
Mounting hole size	8mm*8mm(± 2 mm)
Weight	7.5 Kg.
Cell to Cell Gap	2 mm
Internal Circuit Connection	Copper Ribbon
Frame	Silver (more then 15 micron) Anodized Aluminium
Cells Encapsulant	EVA (Ethylene Vinyl Acetate)- FC/UFC
Junction Box (Model Type & current Rating)	IP 68 rated with 1 Bypass diodes 2T1D
Cable & Connectors	No
Mechanical Load Condition	Sustain Heavy wind & snow loads (2400 Pa & 5400 Pa or 550 Kg/m ²)
	Maximum diameter of 24 mm with Hail impact of 83 Km/h

Mounting Diagram Details



Packing Details

No. Of Modules Per box/Pallet	Weight Of Box/Pallet	Dimensions Of Pallet (LxWxH) in mm
5	37.5 kg	690x200x1040

*Due to constant product modifications, company reserves the right to amend the above specifications without prior notice.