

Technical Specifications



Specifications	ECE12CP050
Power (Pm) in Watts (nominal)	50
Open Circuit Voltage (Voc) in Volts	22.40
Short Circuit Current (Isc) in Amps	2.9
Voltage at Max Power (Vmp) in Volts	19.48
Current at Max Power (Imp) in Amps	2.85
Module Fill Factor (%)	78.84
Module Efficiency (%)	15.22
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	10A 6
Max Series Fuse Rating in Amps	6

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

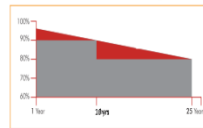
Temp. Coefficient Tc

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

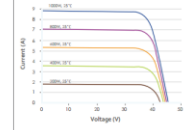
Performance Warranty

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

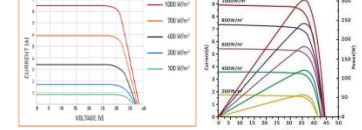
Performance Warranty



IV CURVE

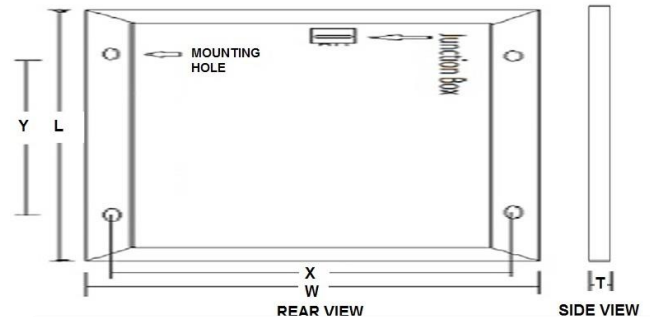


IV Curves



Solar Cells Type	Polycrystalline solar cells -5 BB
Solar Glass	3.2 mm High transmission low iron tempered glass AR coated
Length (L)x Width(W) x Height(T)	425mmx665mmx22mm (± 1.5 mm)
Area	0.282625 SQM
Mounting Hole Pitch (Y)	245 mm
Mounting Hole Pitch (X)	634 mm
Mounting hole size	12mm*8mm(± 2 mm)
Weight	3.3 Kg.
Cell to Cell Gap	2 mm
Internal Circuit Connection	Copper Ribbon
Frame	Silver (more than 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 (2 T /1 D)
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
10	35 kg	(LxWXH) in mm 690x315x450

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

ECE INDIA ENERGIES PRIVATE LIMITED

F-27, MIDC EXPRESS HIGHWAY , AMRAWATI

NAGPUR, PIN- 444607