Characteristics of a PV module

Manufacturer, model : **Insolation Energy Pvt.Ltd, INA72P325**

Data source : Manufacturer

STC power (manufacturer)	**Pnom**	**325**	**Wp**	**Technology**		**Si-poly**	
Module size (W x L)		0.990 x 1.960	m²	Rough module area	Amodule	1.94	m²
Number of cells		1 x 72		Sensitive area (cells)	Acells	1.77	m²

Specifications for the model (manufacturer or measurement data)

Reference temperature	TRef	25	°C	Reference irradiance	GRef	1000	W/m²
Open circuit voltage	Voc	45.9	V	Short-circuit current	Isc	9.12	A
Max. power point voltage	Vmpp	37.7	V	Max. power point current	Impp	8.62	A
=> maximum power	Pmpp	324.9	W	Isc temperature coefficient	muIsc	5.5	mA/°C

One-diode model parameters

Shunt resistance	Rshunt	400	ohm	Diode saturation current	IoRef	0.039	nA
Serie resistance	Rserie	0.33	ohm	Voc temp. coefficient	MuVoc	-149	mV/°C
				Diode quality factor	Gamma	0.95	
Specified Pmax temper. coeff.	muPMaxR	-0.38	%/°C	Diode factor temper. coeff.	muGamma	0.000	1/°C

Reverse Bias Parameters, for use in behaviour of PV arrays under partial shadings or mismatch

Reverse characteristics (dark)	BRev	3.20	mA/V²	(quadratic factor (per cell))			
Number of by-pass diodes per module		3		Direct voltage of by-pass diodes		-0.7	V

Model results for standard conditions (STC: T=25°C, G=1000 W/m², AM=1.5)

Max. power point voltage	Vmpp	37.7	V	Max. power point current	Impp	8.62	A
Maximum power	Pmpp	324.9	Wc	Power temper. coefficient	muPmpp	-0.37	%/°C
Efficiency(/ Module area)	Eff_mod	16.7	%	Fill factor	FF	0.776	
Efficiency(/ Cells area)	Eff_cells	18.3	%				

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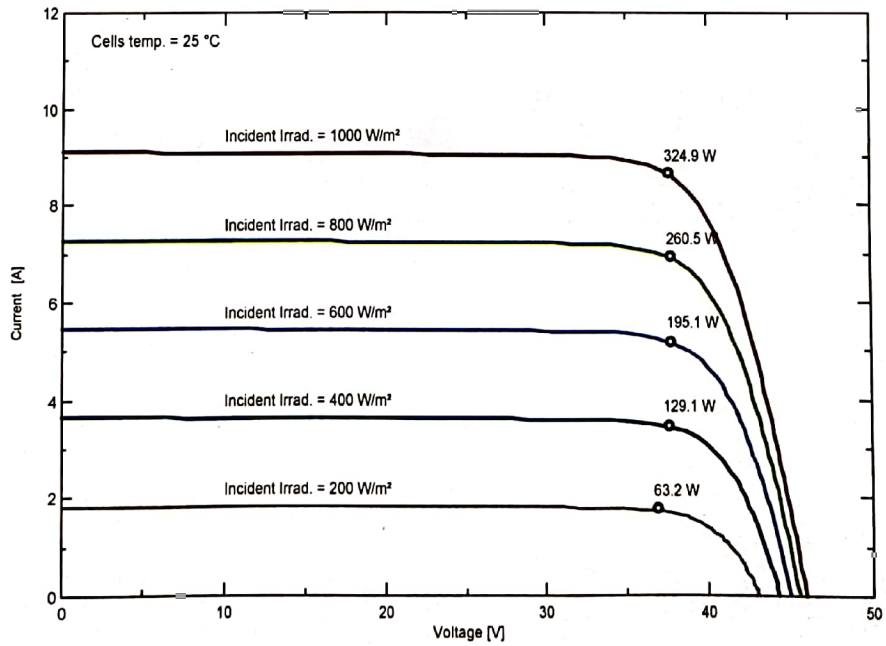

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PVsyst Evaluation mode