

PHOTOVOLTAIC MODULES

(Suitable for Battery Operated Stand-alone systems)

Jain Photovoltaic Module are made from high efficiency Multi Crystalline solar cells. Suitable number of cells are interconnected in series and then encapsulated in low iron content, high transmissivity tempered glass using UV stable Ethylene Vinyl Acetate (EVA) sheets and premium quality back sheet. These encapsulating materials protect the cells from the harsh environmental conditions when laminated together these ensure long life. The laminates are then framed with anodized aluminium frame with holes for ease of installation. PV module are fitted with terminal box of different type and rating, depending upon the application.

Features:

- State of Art lamination Technology used
- Suitable for battery operated stand-alone systems
- Positive power tolerance of modules in all ranges to ensure functioning of the system as per design
- All Materials of Lamination are of highest quality.
- Designed to withstand moderate mechanical load
- Holes provided for mounting on the structure
- Three rails terminal box for 37W to 74W modules with provision for blocking diode.
- Anodized aluminum frame
- Modules tested by Solar Energy Center, Govt. of India, and designed to meet International Standards.



Typical Electrical Characteristics*:

Module Type	JJ-1210	JJ-1212	JJ-1218	JJ-1237	JJ-1245	JJ-1274
Module Size (mm)	310x340x21 ±2	350x340x21 ±2	490x340x21 ±2	490x660x35 ±2	600x660x35 ±2	925x660x35 ±2
Module Weight (Kg) Approximate	1.5	1.5	2	4.5	5	7.5
Maximum Peak Power P_m (W) [Tolerance of P_m +5%, -0%]	10	12	18	37	45	74
Open Circuit Voltage V_{oc} (V) [Tolerance ± 5%]	21.8	21.8	21.8	21.8	22.10	22.10
Short Circuit Current I_{sc} (A) [Tolerance ± 5%]	0.67	0.805	1.18	2.37	2.88	4.67
Voltage at Maximum Peak Power V_{mpp} (V)	17.5	17.5	17.5	17.5	17.8	17.8
Current at Maximum Peak Power I_{mpp} (A) [Tolerance ± 5%]	0.69	0.69	1.03	2.12	2.53	4.16
Maximum System Voltage (V)	50	50	50	50	50	50

- *All electrical measurements are at STC (25° C, 1.5 AM, 1000 W/m²)
- Specifications are subjected to change without prior notice.
- Other Wattages are available on request

Characteristics:

- Cell Type: Multi Crystalline Silicon Solar Cells
- Cell Configuration : 36 cells
- Temperature coefficient of P_{max} : -0.47%/°K
- Temperature coefficient of I_{sc} : +0.02%/°K
- Temperature coefficient of V_{oc} : -0.35%/° K
- Normal Operating Cell Temperature (NOCT) : 45 ± 2°C
- Maximum Series Fuse : 3 X Rated I_{mpp} of the module

Warranty:

- 2 years for material and workmanship
- 10 years for module performance of minimum 90% power output
- Contact Jain Solar for complete warranty details.

Applications:

- LED and CFL based Lanterns, Home Lightings and Street Lightings, Water Pumping Systems Off-grid Applications, Roof-Top Systems and Telecom Sites, etc.



- Periodic Inspection
- Qualified, IEC 61215
- Safety tested, IEC 61730