



Your new energy partner!

# Solar PV Modules

## Polycrystalline Solar PV Modules 40-125W



Higher Efficiency



Easy Handling & Installation



Maximum System Voltage of 600V DC



Higher Module Power Output



BOS Cost Reduced



15 Years Product Workmanship Warranty



27 Years Product Performance Warranty



## Why HVR Solar ?

Stringent Quality Control

Intensive R&D

Highly Skilled Management

Tier-1 Raw Material Used

Highest Standards of Product

Door-to-Door Supply Chain & Logistic

## Product Reliability Factor



Positive Power Tolerance



Withstand Harsh Environmental Conditions



100% EL Inspected-Micro Crack Free Module



High Low Light Performance



High Resistivity AR Coated Glass



PID Resistant 5/6 BB Cells & Encapsulants

## Applications



Portable mobile charging



Home lightning System



Solar lantern



Street Light Application



Off-Grid Rooftop Systems



Module Series	HVRP036C12V040	HVRP036C12V050	HVRP036C12V060	HVRP036C12V075	HVRP036C12V080	HVRP036C12V100	HVRP036C12V105	HVRP036C12V110	HVRP036C12V125
Dimension-LxW (MM)	431*665	545*665	605*665	775*665	775*665	1010*665	1010*665	1060*665	1215*665
Cell Size (MM)	39*157	52*157	59*157	72*157	78*157	100*157	104*157	110*157	120*157
No of Cell	36	36	36	36	36	36	36	36	36
Max Series Fuse Rating	6A	6A	6A	6A	6A	10A	10A	10A	10A
Maximum System Voltage (V)	600	600	600	600	600	600	600	600	600

## Electrical Characteristics at STC

Maximum Power Pmax (Wp)	40	50	60	75	80	100	105	110	125
Maximum Voltage Vmpp (V)	18.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50
Maximum Current Impp (A)	2.18	2.72	3.28	4.08	4.36	5.44	5.68	5.96	6.76
Open circuit Voltage Voc (V)	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Short Circuit Current Isc (A)	2.56	3.15	3.54	4.40	4.80	5.93	5.95	6.15	7.31
FF	0.72	0.73	0.78	0.78	0.76	0.77	0.80	0.81	0.78
Module Efficiency(%)	14.07	13.88	15.08	14.65	15.65	14.98	15.65	15.65	15.48

STC:1000W/m<sup>2</sup> Irradiance, 25°C cell temperature, AM1.5G spectrum according to EN 60904-3

2 Average relative efficiency reduction of <5% for every 200W/m reduction in Irradiance, according to EN 60904-1

## Electrical Characteristics at NOCT

Maximum Power Pmax (Wp)	28.70	35.80	43.35	53.20	58.14	71.90	74.55	78.82	88.34
Maximum Voltage Vmpp (V)	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42
Maximum Current Impp (A)	1.75	2.18	2.64	3.24	3.54	4.32	4.54	4.80	5.38
Open circuit Voltage Voc (V)	19.93	19.93	19.93	19.93	19.93	19.93	19.93	19.93	19.93
Short Circuit Current Isc (A)	1.98	2.39	2.78	3.40	3.55	4.68	4.81	4.96	6.02

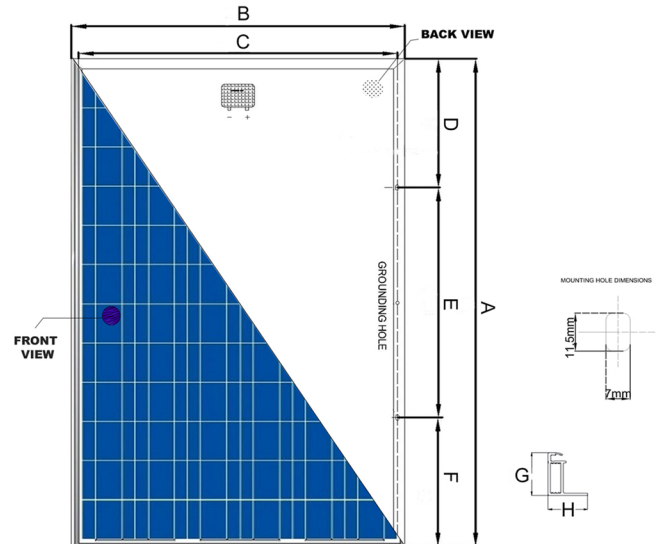
NOCT:800W/m<sup>2</sup> Irradiance, 20°C ambient temperature, Wind Speed 1m/sec

## Temperature Coefficients (Tc) Permissible Operating Conditions

Tc of Open Circuit Voltage (α)	-0.31%/°K
Tc of Short Circuit Current (β)	0.050%/°K
Tc of Power (γ)	-0.41%/°K
NOCT	46 ± 2°C
Temperature Range	-40°C to +85 °C
Limiting Reverse Current (Ir)	15A

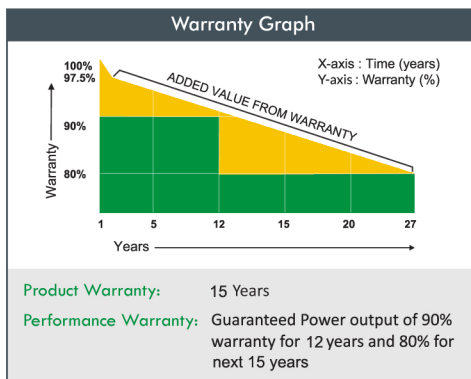
## Mechanical Data

Junction Box	IP 65 rated with Bypass diodes
Application Class	Class A (Safety class II)
Substrate (Glass)	High transmission low iron tempered glass
Solar cells & Orientation	Polycrystalline Solar Cells
Cells Encapsulant	EVA (Ethylene Vinyl Acetate) - FC/UFC
Back Sheet	Composite film - White
Frame	Silver Anodized aluminum frame with twin wall profile
Mechanical Load Test	Sustain Heavy wind & snow loads (2400 Pa & 5400 Pa or 550 Kg/m <sup>2</sup> Maximum diameter of 24 mm with Hail impact of 83 Km/h)

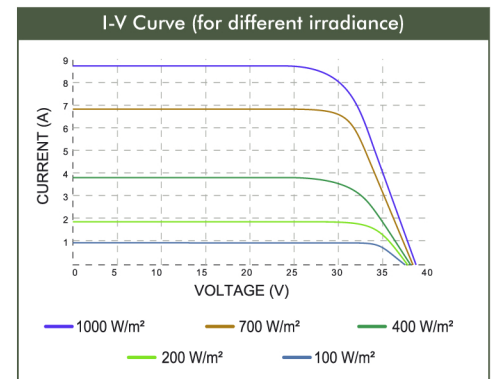


## Module & Hole Mounting Dimension

DIMENSION (in mm)	HVRP036C12V040	HVRP036C12V050	HVRP036C12V060	HVRP036C12V075	HVRP036C12V080	HVRP036C12V100	HVRP036C12V105	HVRP036C12V110	HVRP036C12V125
A	431	545	605	775	775	1010	1010	1060	1215
B	665	665	665	665	665	665	665	665	665
C	635	635	635	635	635	635	635	635	635
D	65.5	122.5	152.5	237.5	237.5	255	255	280	357.5
E	300	300	300	300	300	500	500	500	500
F	65.5	122.5	152.5	237.5	237.5	255	255	280	357.5
G	35	35	35	35	35	35	35	35	35
H	25	25	25	25	25	25	25	25	25



Approvals and Certification	
Products:	IEC 61215 ,ROHS IEC 61730, IEC 61701, CE, UL 1703,
Manufacturing:	ISO 9001:2015, ISO 14001: 2015 ISO 45001:2018



## Corporate Office

Unit No. 1107, Aggarwal Corporate Heights,  
Netaji Subhash Place, New Delhi-110034.

## Works

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