



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 PHOTON 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



RoHS



Solar PV Modules

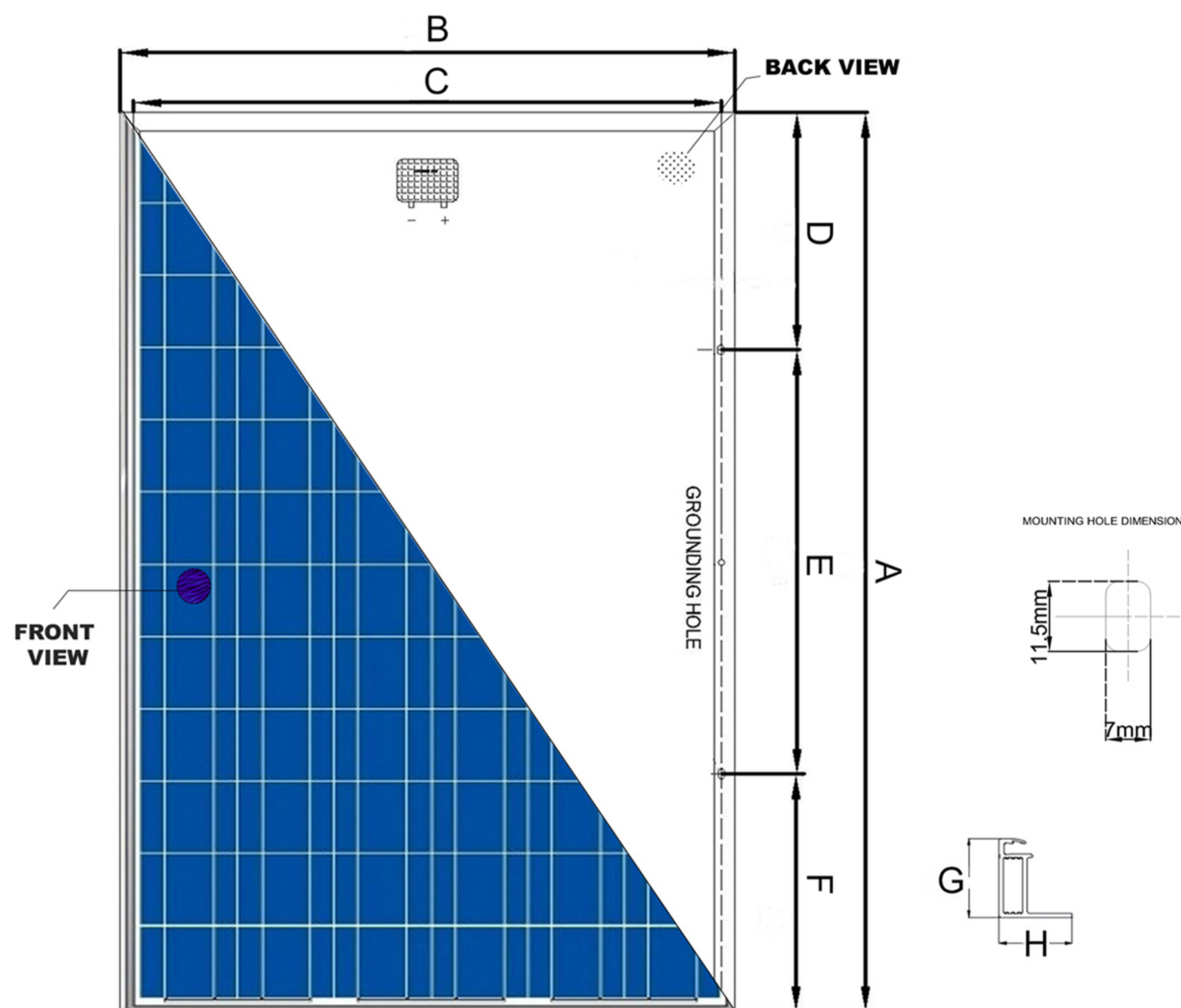
Polycrystalline Solar PV Modules 40-125W



Module & Hole Mounting Dimension

DIMENSIONS (in mm)	WATTAGE								
	40Wp	50Wp	60Wp	75Wp	80Wp	100Wp	105Wp	110Wp	125Wp
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

★ Note:-Dimensions mentioned in this sheet are subject to change without notice.Please confirm the same with Company representative while placing the order.



Applications

- Portable mobile charging
- Home lightning System
- Solar lantern
- Street Light Application
- Off-Grid Rooftop Systems



PHOTON TECH GENERAL TRADING LLC

Office No: 1708-54C, 17th Floor , IRIS BAY TOWER
Business Bay, Dubai, UAE. P.O. Box -34076
Website: www.photontechsolution.com
Email: info@photontechsolution.com



Customer Care

service@photontechsolution.com

Contact at :

+971 043 83 6999 (Ext-101)

+971 52 523 9064

+971 52 523 9064
+971 52 239 8851

TECHNICAL DATA



Module Series	P036C12V040	P036C12V050	P036C12V060	P036C12V075	P036C12V080	P036C12V100	P036C12V105	P036C12V110	P036C12V125
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/m2 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

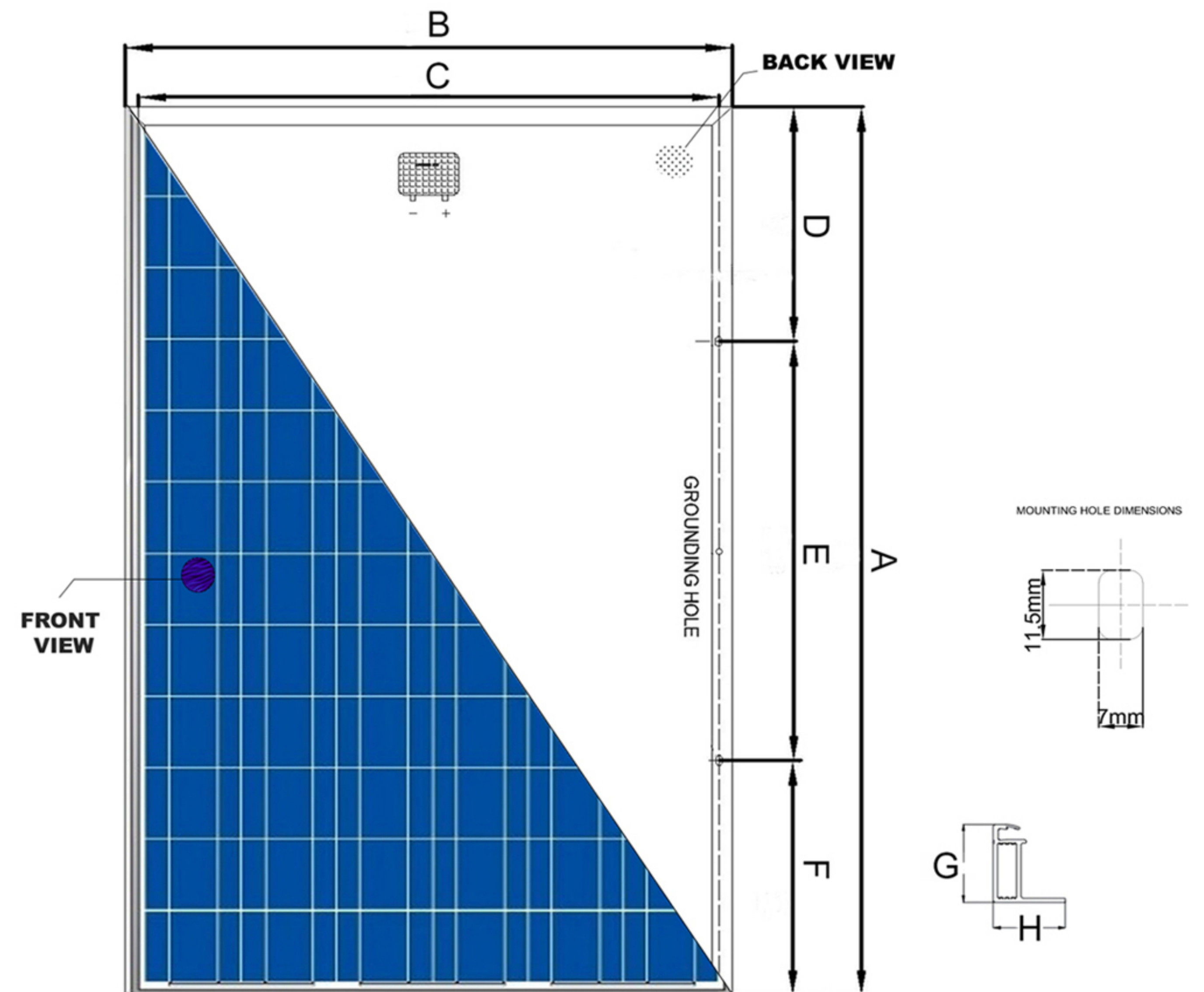
NOCT:800W/m2 irradiance, 20°C ambient temperature, Wind Speed 1m/sec

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

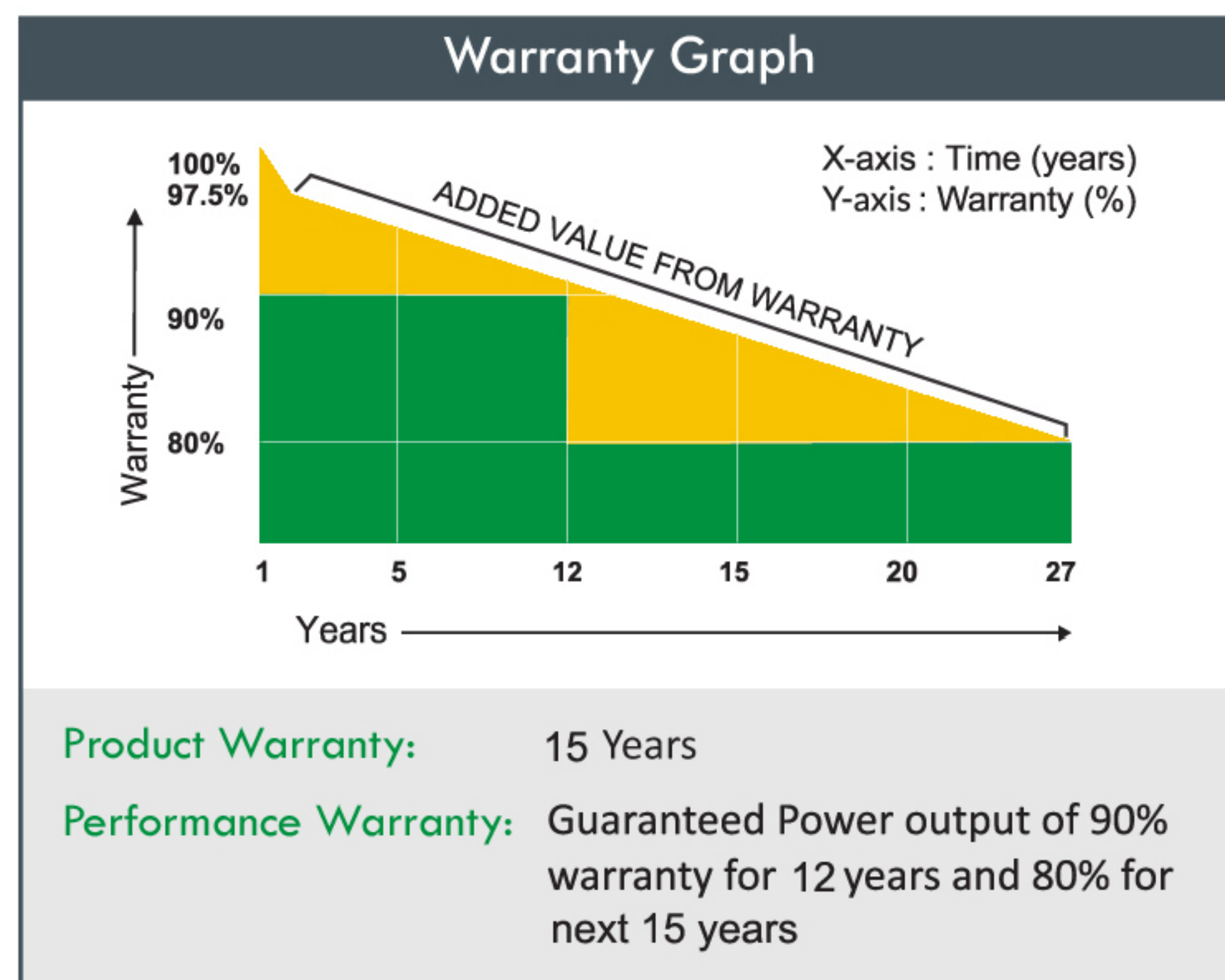
Mechanical Data

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/m2 Maximum diameter of 24 mm with Hail impact of 83 Km/h)



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

