

## ENERGYZING A SUSTAINABLE FUTURE





PV Power Tech is a leading manufacturer of High Efficiency Solar PV Panel & a solar system integrator since 2008. We have successfully manufactured & supplied more than 100 MW of modules, which have been installed across India and Europe.

Our panels are suitable for and have been installed in various applications like Solar Power Plants, Solar Roof-top systems; Solar based Water Pumping Systems.

We have successfully implemented more than 3000 solar-based water pumps across INDIA. We are an SP1B rated MNRE (Ministry of New and Renewable Energy) channel Partner for providing various rooftop solar solutions.

## HARNESS THE ABUNDANT POWER OF THE SUN

PV Power Tech's state of the art manufacturing plant has the finest of production equipment's imported from Europe. Our plants is ISO 9001 and ISO 14001 certified further solidifying our focus on manufacturing only the highest quality of PV modules. Our current annual PV Module production capacity of 100 MW will be upgraded to reach the 200 MW mark by August 2017.

## **GO GREEN. SAVE GREEN.**

We deeply believe in promoting the application of photovoltaic technology as a preferred choice in energy by giving cost effective solutions without compromising on Quality, Performance and Safety.



#### **SOLAR POWER PLANTS AND ROOF-TOP SOLUTIONS**

PV Powertech is an SP1B rated channel Partner of MNRE, Government of INDIA. This rating further strengthens our claim of providing our clients with noting but state-of-the-art solar solutions for grid-connected as well as off-grid systems.

The experience gained from successfully completing 300+ rooftop installations PAN India, totaling to 10.3 MW with levels ranging from 5 KW to 2.4 MW, makes PV Powetech one of the finest solution providers in India. Our Modules have been recently installed at Prestigious government locations like IIT Delhi, Airport Authority of India - Ahmedabad & Indore Airport.



100+ MW MODULES INSTALLED



**EXPORTERS**WORLDWIDE



10+ MW SOLAR ROOF INSTALLED



STATE-OF-THE-ART MACHINERY



3000+ WATER PUMP INSTALLED



**QUALITY** 







MNRE SP1B

### **SOLAR WATER PUMPING SYSTEMS**

Solar water pumps solutions supplied by PV Powertech are specially designed to lift water for irrigation, horticulture farms, gardens, domestic use, drinking and other similar applications.

With an experience of successfully supplying and installing more than 3000 solar pumps mainly of 3 and 5 HP we at PV Powertech are extremely well positioned to provide all types of solutions for this technology. We have the capability to install Solar Water pumps starting from 0.5 HP to any upper capacity.

# ECO SERIES - DEVELOPING THE SOLAR ARRAY OF THE FUTURE

At PV Power Tech, our focus is to recognise market trends and opportunities which helps develop innovative products. This yields to better products and higher returns for our customers.

Our ECO series panels are high efficiency solar panels manufactured using only the premium raw materials available from industry leaders.

Our panels are available in different sizes and watt options ranging from 36 cells up to 72 cells reaching modules efficiencies of close to 16.5%.

#### **PREMIUM QUALITY**

PV Power Tech, modules are manufactured using state-of-the-art automated manufacturing processes that ensure consistency in production and high quality standards. Our manufacturing standards adhere to strict guidelines laid down by ISO 9001 certifications. Our plant is also certified for ISO 14001.

#### **CERTIFICATIONS**

ECO series panels are certified for industry standard IEC 61215 (design and performance) and IEC 61730 (safety class II) certification by both TUV intercert as well as UL. Over and above these standard certifications our panels have also been tested and approved by the leading association of farmers in Germany DLG e.v. for its long term resistance to Ammonia. Our Modules are FREE from PID effect & are IEC 62804 certified.

#### **FLEXIBLE APPLICATIONS**

Our panels are suitable for a wide range of application — from individual homes to industry roofs and ground-mounted system. They are compatible with all industry standard mounting system as well as inverters. The ECO series is available as both framed and laminates. It is designed for easy installation. Additionally, customization with black back sheet and black frames is also offered for an aesthetically appealing product.

#### **CORROSION RESISTANCE**

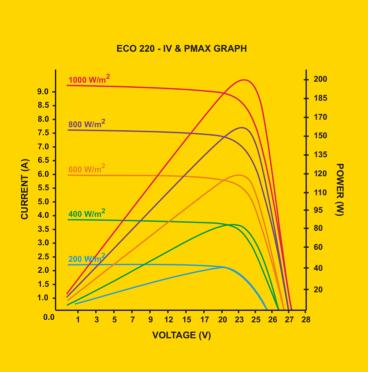
The ECO series has been tested by TUV for IEC 61701 proving its resistance to salt, mist, corrosion and can be installed in areas with salty air, especially near sea.

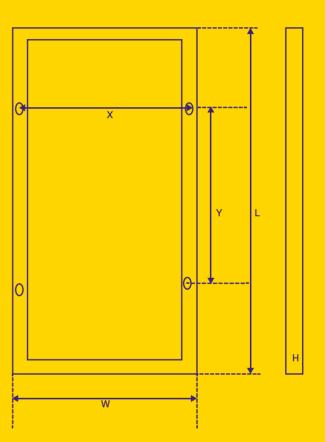
#### **RELIABILITY**

The ECO series panel are backed by a standard 10 years limited manufacturing warranty, power warranties of 90% of the minimum output power of 10years and 80% of the minimum output power for 25 years. High resistance to Mechanical loads/snow loads upto 5,400 Pa.

48 FULL CELL MODULE DETAILS									
Electrical Parameters									
Model Name	ECO 200 ECO 205 ECO 210 ECO 215 ECO 220								
Cell Configurations (Nos.)	8 x 6 (48) Series								
Pmax (W) (0 + 3.0%)	200	200 205 210 215 220							
Voc (V) (0 ± 3.0%)	30.7	31	31.20	31.5	31.7				
Isc (A) (0 ± 3.0%)	8.66	8.66 8.77 8.90 9 9.12							
Vmax (V)	24.3	24.5	24.70	24.9	25.1				
Imax (A)	8.24	8.4	8.52	8.66	8.78				
Fill Factor (%)	75.23%	75.23%         75.40%         75.63%         75.84%         76.10%							
Module Efficiency (%)	15.14% 15.51% 15.89% 16.27% 16.65%								
Maximum System Voltage (VDC)	1000								
Nominal Operating Cell Temp. (NOCT) (°C)	44 ± 2								
Temp. Coefficient of Pmax (%/°C)	-0.42								
Temp. Coefficient of Voc (%/°C)	-0.32								
Temp. Coefficient of Isc (%/°C)	0.05								

Electrical values measured at STC: 25°C, 1.5AM, 1000 W/m<sup>2</sup>





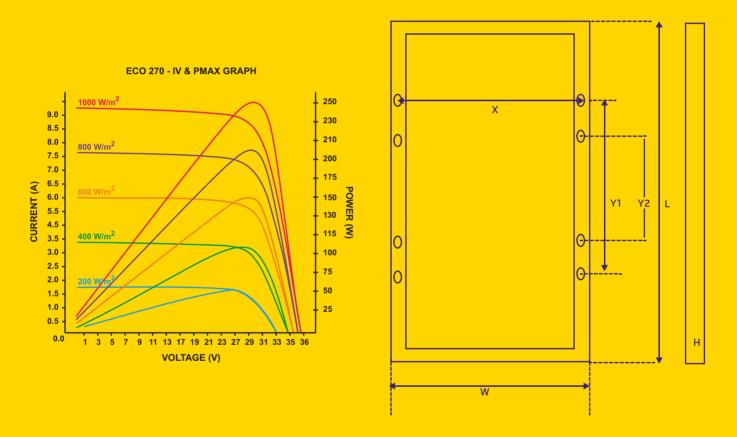
	MECHANICAL PARAMETERS							
	ECO 200	ECO 205	ECO 210	ECO 215	ECO 220			
L - Length of Module (mm)	1332 mm ± 1.0 mm							
W - Width of Module (mm)	992 mm ± 1.0 mm							
H - Height of Module (mm)	35 mm ± 0.5 mm							
X - Pitch Distance (mm)	955 mm ± 0.5 mm							
Y- Pitch Distance (mm)	700 mm ± 0.5 mm							
Mounting Hole (mm)	4 oblong of size 6.5 mm x 10 mm							
Cell	4 BB Polycrystalline Solar Cells							
Junction Box	TUV approved, IP 65 / IP 67 rated 4 terminal junction box with 3 bypass diodes							
Cable	1000 mm long 4.0 mm <sup>2</sup> cables with MC4 compatible connectors							
Weight			15 kg					

Certificates: The Modules are certified to IEC 61215 & IEC 61730, Electrical Protection Class II and the CE - guidelines. Moreover PV Power Tech is certified & Registered to ISO 9001 & ISO 14001.

Note:
1. PV Power Tech reserves the right to change the specifications with prior notice.
2. All measurements and warranty/guarantee applicability under standard test conditions (1000W/m2, 25°C, AM 1.5)

60 FULL CELL MODULE DETAILS									
Electrical Parameters									
Model Name	ECO 250 ECO 255 ECO 260 ECO 265 ECO 270								
Cell Configurations (Nos.)	10 x 6 (60) Series								
Pmax (W) (0 + 3.0%)	250	255	260	265	270				
Voc (V) (0 ± 3.0%)	37.55	37.65	37.75	37.82	37.95				
Isc (A) (0 ± 3.0%)	8.84	8.84 8.97 9.1 9.23 9.35							
Vmax (V)	29.7	29.9	30.1	30.30	30.55				
Imax (A)	8.43	8.54	8.65	8.76	8.85				
Fill Factor (%)	75.31%	75.51%	75.69%	75.91%	76.09%				
Module Efficiency (%)	15.27%	15.58%	15.88%	16.19%	16.50%				
Maximum System Voltage (VDC)	1000								
Nominal Operating Cell Temp. (NOCT) (°C)	44 ± 2								
Temp. Coefficient of Pmax (%/°C)	-0.42								
Temp. Coefficient of Voc (%/°C)	-0.32								
Temp. Coefficient of Isc (%/°C)	0.05								

Electrical values measured at STC: 25°C, 1.5AM, 1000 W/m<sup>2</sup>



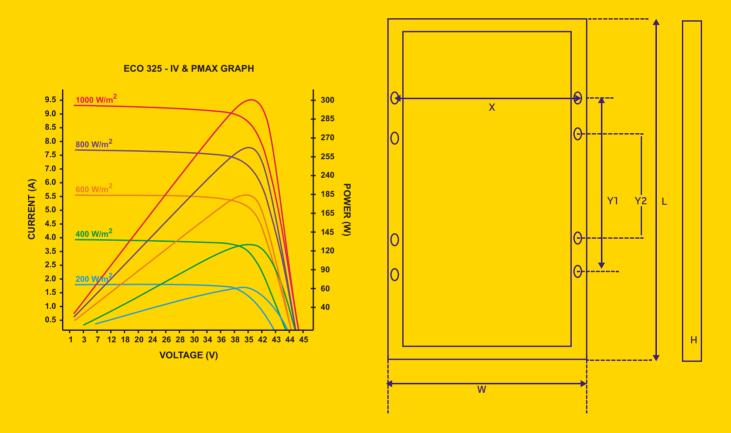
	MECHANICAL PARAMETERS							
	ECO 250	ECO 255	ECO 260	ECO 265	ECO 270			
L - Length of Module (mm)	1650 mm ± 1.0 mm							
W - Width of Module (mm)	992 mm ± 1.0 mm							
H - Height of Module (mm)	35 mm ± 0.5 mm							
X - Pitch Distance (mm)	955 mm ± 0.5 mm							
Y- Pitch Distance (mm)	Y1 - 1,350 & Y2 - 852 mm ± 0.5 mm							
Mounting Hole (mm)	8 oblong of size 6.5 mm x 10 mm							
Cell	4 BB Polycrystalline Solar Cells							
Junction Box	TUV approved, IP 65 / IP 67 rated 4 terminal junction box with 3 bypass diodes							
Cable	1000 mm long 4.0 mm <sup>2</sup> cables with MC4 compatible connectors							
Weight			19 kg					

Certificates: The Modules are certified to IEC 61215 & IEC 61730, Electrical Protection Class II and the CE - guidelines. Moreover PV Power Tech is certified & Registered to ISO 9001 & ISO 14001.

Note:
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2. All measurements and warranty/guarantee applicability under standard test conditions (1000W/m2, 25°C, AM 1.5)

72 FULL CELL MODULE DETAILS								
Electrical Parameters								
Model Name	ECO 300   ECO 305   ECO 310   ECO 315   ECO 320   ECO 325							
Cell Configurations (Nos.)	12 x 6 (72) Series							
Pmax (W) (0 + 3.0%)	300	300 305 310 315 320 325						
Voc (V) (0 ± 3.0%)	45.1	45.1 45.2 45.3 45.45 45.55 45.65						
Isc (A) (0 ± 3.0%)	8.8 8.91 9.02 g <sub>.10</sub> 9.2 9.3							
Vmax (V)	35.95 36.1 36.3 36.50 36.7 36.9							
Imax (A)	8.36	8.36 8.46 8.55 8.64 8.73 8.82						
Fill Factor (%)	75.59%	75.59%         75.73%         75.87%         76.16%         76.36%         76.55%						
Module Efficiency (%)	15.38%	15.38% 15.64% 15.90% 16.15% 16.41% 16.66%						
Maximum System Voltage (VDC)	1000							
Nominal Operating Cell Temp. (NOCT) (°C)	44 ± 2							
Temp. Coefficient of Pmax (%/°C)	-0.42							
Temp. Coefficient of Voc (%/°C)	-0.32							
Temp. Coefficient of Isc (%/°C)	0.05							

Electrical values measured at STC: 25°C, 1.5AM, 1000 W/m<sup>2</sup>



	MECHANICAL PARAMETERS							
Parameters	ECO 300	ECO 305	ECO 310	ECO 315	ECO 320	ECO 325		
L - Length of Module (mm)	1966 mm ± 1.0 mm							
W - Width of Module (mm)		992 mm ± 1.0 mm						
H - Height of Module (mm)	40 mm ± 0.5 mm							
X - Pitch Distance (mm)	955 mm ± 0.5 mm							
Y- Pitch Distance (mm)	Y1 - 1,670 & Y2 - 1,200 mm ± 0.5 mm							
Mounting Hole (mm)	8 oblong of size 6.5 mm x 10 mm							
Cell	4 BB Polycrystalline Solar Cells							
Junction Box	TUV approved, IP 65 / IP 67 rated 4 terminal junction box with 3 bypass diodes							
Cable	1000 mm long 4.0 mm <sup>2</sup> cables with MC4 compatible connectors							
Weight	24 kg							

Certificates: The Modules are certified to IEC 61215 & IEC 61730, Electrical Protection Class II and the CE - guidelines. Moreover PV Power Tech is certified & Registered to ISO 9001 & ISO 14001.

Note:
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2. All measurements and warranty/guarantee applicability under standard test conditions (1000W/m2, 25°C, AM 1.5)





Team PV Power Tech will be happy to assist you with your queries and requirements.

#### PV Power Technologies Pvt. Ltd.

Unit - GJ 14, SDF VII, SEEPZ SEZ, Andheri (E), Mumbai 400096. India.

Telephone: +91 22 4221 4800 Fax: +91 22 4221 4801
Email: info@pvpowertech.com Web: www.pvpowertech.com















