



THE SOLAR PIONEER

We at Emmvee have played a key role in boosting solar solutions in India. With our expertise and over 25 years of producing solar water heating solutions and photovoltaic modules, we are the preferred partners for several industry leaders and solar power projects globally.

We understand our consumers and constantly innovate to deliver solutions that meet their needs. Which is why we have introduced **Emmvee Crystal - 1500V DC PV Module**, a solar panel that produces 1500 volts rather than the standard 1000 volts, thus delivering a higher output and increased efficiency.

EMMVEE CRYSTAL - 1500V DC PV MODULE

Every Emmvee product is manufactured to stringent global standards and certified by:



ISO 9001:2015
QUALITY MANAGEMENT SYSTEM



ISO 14001:2015
ENVIRONMENTAL
MANAGEMENT SYSTEM



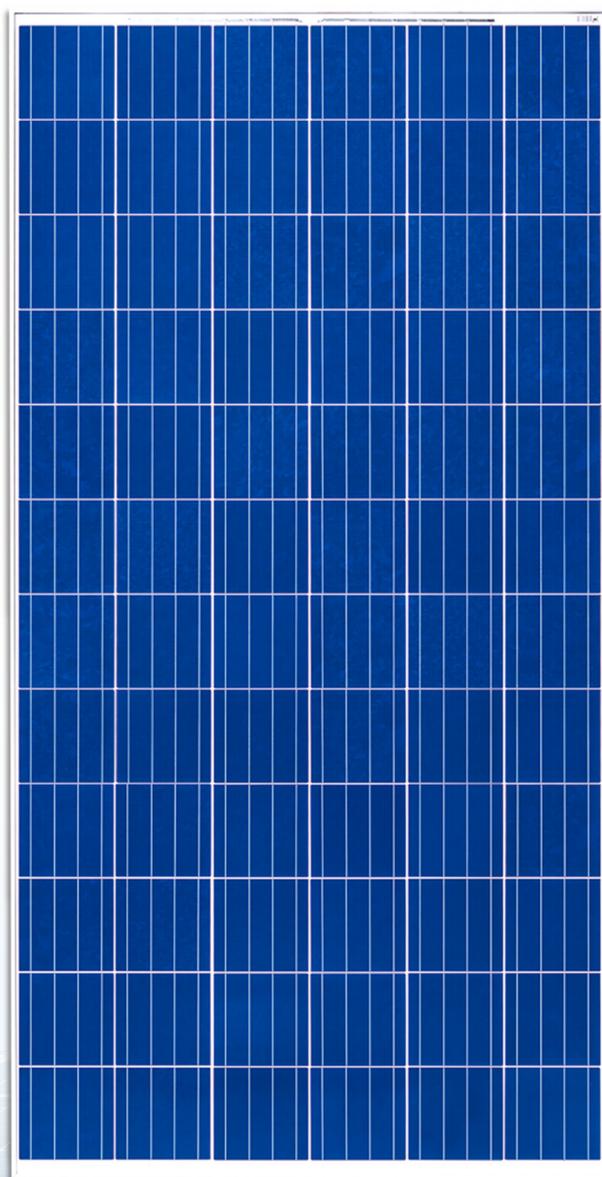
OHSAS 18001:2007
OCCUPATIONAL HEALTH AND
SAFETY ASSESSMENT SERIES



IEC 61215, IEC 61730
IEC 61701 & IEC 62759



DNV-GL
ISO 9001-ISO 14001
OHSAS 18001



72 CELL
MULTI-CRYSTALLINE MODULE



17.18%
EFFICIENCY



315-335W
POWER OUTPUT RANGE



+5W
TOLERANCE



25 YEARS
LINEAR POWER WARRANTY



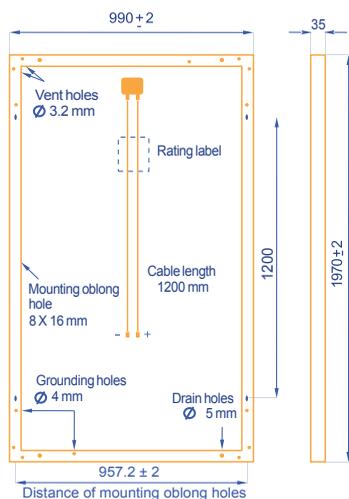
10 YEARS
PRODUCT WARRANTY
ON MODULE

72 CELLS MODULES SPECIFICATION

Electrical data at 1000 W/m ² 25°C and A.M. 1.5 (STC in accordance with IEC 60904-3)					
Rated power at STC ¹	315 Wp	320 Wp	325 Wp	330 Wp	335Wp
Module efficiency at STC ²	16.15%	16.41%	16.66%	16.92%	17.18%
Open circuit voltage - Voc (Volts)	45.4	45.7	45.8	45.9	46
Short circuit current - Isc (Amps)	9.01	9.06	9.11	9.2	9.31
Max power voltage - V _{pm} (Volts)	36.7	37.1	37.4	37.7	37.8
Max power current - I _{pm} (Amps)	8.58	8.63	8.68	8.76	8.86
¹ The measurement tolerance of the rated power is ± 3%. The modules delivered are sorted in a range of ± 2.5 Wp.					
² At low irradiance (200 W/m ² , 25°C and AM 1.5), the module yields at least 96% of the STC efficiency.					
Electrical data at 800 W/m ² , NOCT, 1m/s wind speed and AM 1.5					
Rated power at (P _{max})	234	238	242	246	249
Open circuit voltage - Voc (Volts)	42.3	42.5	42.6	42.7	42.9
Short circuit current - Isc (Amps)	7.27	7.35	7.47	7.57	7.58
Rated voltage - (V _{mpp})	34.3	34.4	34.5	34.6	34.9
Rated current - (I _{mpp})	6.83	6.91	7.02	7.11	7.14
Thermal data					
Temperature coefficient open circuit voltage	-0.34% / K				
Temperature coefficient short circuit current	+0.05% / K				
Temperature coefficient rated power	-0.4% / K				
NOCT (normal operating cell temperature)	46°C ± 2°C				
Mechanical data					
Number of cells & cell type	72 multi-crystalline solar cells (156.75 mm x 156.75 mm)				
Dimensions: length x width x height	1970 mm x 990 mm x 35 mm				
Weight	22 kg				
Front glass	3.2 mm high transmission, tempered glass				
Embedding	EVA				
Back sheet	Composite film, white				
Junction box	Protection class IP 65/67				
Number of bypass diodes	3				
Cables	4 mm ² solar cables, length 1200 mm				
Connectors	MC4 compatible				
Possible operating conditions					
Operating temperature range	-40°C to 85°C				
Max. system voltage	1500 VDC				
Max. reverse current	20A				
Max. surface load capacity	5400 Pa				
Resistance against hail	Maxø 24 mm with impact speed of 83 km/h				
Protection class	II				

TECHNICAL DRAWING

All Dimensions in mm



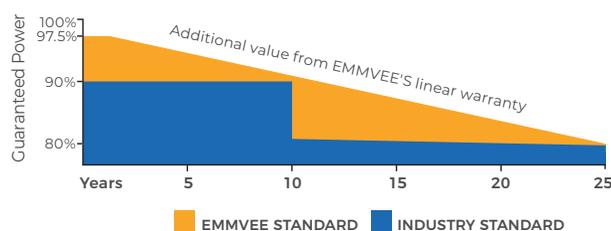
Note 1: The specification - graphical representation made herein may deviate slightly and are not guaranteed due to ongoing innovation, research and product enhancements. We reserve the right to make any modification to the information contained herein at any time without notice. Always obtain the most recent version of datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Note 2: It is mandatory to make negative grounding of modules in all installations to avoid PID issue.

* Refer EMMVEE standard warranty terms and conditions.
** On availability of stock.

LINEAR PERFORMANCE WARRANTY

- » 10 Year Product Warranty
- » 25 Year Linear Power Warranty



EMMVEE Photovoltaic Power Private Limited

No. 13/1 International Airport Road,
Bettahalasur Post, Bengaluru - 562 157, Karnataka, India.
T: +91 80 2217 4333 | E: info@emmvee.in | www.emmvee.com