# LUMINOUS

## PV PANELS

## Designed For High Performance

Luminous offers a range of both Mono PERC half cut and Polycrystalline PV modules. Ranging from 40W to 550W, our panels are BIS certified as per IS/IEC standards and are suitable for a wide range of applications.







5 & 12 Years\* Product Warranty



Enlisted under ALLM Order





#### Excellent Low-light Performance

Built with high quality glass and solar cell surface coating, especially for performance in low-light conditions.



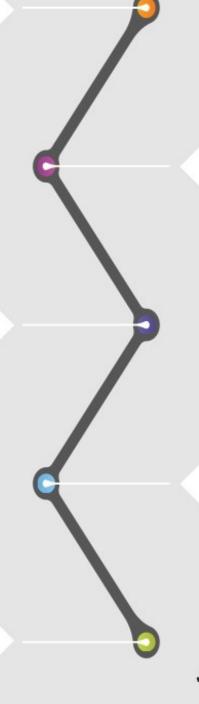
#### Resilience to Extreme Weather

The robust waterproof, corrosion and torsion resistant design offers protection against wind and snow.



### PID Resistance Technology

Designed to eliminate power loss owing to stray currents



#### Advance EVA Encapsulation

Designed with multi layer EVA (ethyl vinyl acetate) encapsulation for better module protection.



### Best in Class Efficiency

ensures optimum solar power generation providing high value for money.



#### **IDEAL FOR**

✓ Large scale utility systems ✓ Rooftop residential,
commercial and industrial roof top installations
✓ Agricultural pumping applications

\*Refer models for respective warranty

### Electrical Parameters @ STC#

Model ALMM Reference Model	LUM 1240	LUM 1280	LUM 12105	LUM 12170	LUM 24330	ALP 335W	LUM 24540MPHC	PE- 550HM
Cell Type	Poly	Poly	Poly	Poly	Poly	Poly	Mono PERC Half Cut	Mono PERC Half Cut
No. of Cells	36	36	36	36	72	72	144	144
Peak Power PMax (Wp)	40	80	105	170	330	335	540	550
Rated Module Voltage (V)	12	12	12	12	24	24	24	24
Maximum Power Voltage Vmp (V)	18	18	18.05	18.86	38.03	38.08	41.92	41.95
Maximum Power Current Imp (A)	2.23	4.4	5.82	9.02	8.68	8.80	12.89	13.12
Open Circuit Volatge Voc (V)	22	22	22	23.01	45.53	46.02	49.40	49.80
Short Circuit Current Isc (A)	2.42	4.8	6.28	9.61	9.22	9.43	13.72	13.98
Module Efficiency (%)	13.72%	15.21%	15.14%	16.47%	16.85%	16.85%	20.89%	21.28%
Maximum System Voltage (V)	600V	600V	600V	600V	1000V	1500V	1500V	1500V
Maximum Series Fuse Rating	12A	12A	12A	12A	20A	20A	25A	25A

 $\pm$ STC (1000W/m²), AM 1.5, cell temperature 25°C". Power Tolerance: 0/+5%. Power measurement accuracy:  $\pm$ 3% Our solar panels are included in Detailed List of Manufacturers and Models of Solar PV Modules Recommended under ALMM Order

### Mechanical Data

Module Dimensions (mm)	435x670	785x670	1035x670	1505x686	1976x996	1986x1001	2279x1134
LxWxT	x34	x34	x34	x35	x35	x35	x35
Module Weight (kgs)	3.30	6.50	8.20	11	22.50	21	29
IP Rating	IP 65	IP 65	IP 65	IP65	IP 67	IP 67	IP67
Cable & Connectors	100	No cable and connectors		1000mm length cables			1400mm length cables, MC4 Compatible/MC4 Connectors
Frame	Silver Anodized aluminium alloy						
Glass		3.2mm thick high transmission low iron tempered glass, AR coated					
Cell Encapsulant	EVA (Ethyelene Vinyl Acetate)						
Back Sheet	Composit Film						
Maximum Surface Load Capacity		5400 Pa (Pascals)					
Aplication Class	Class A (Safety Class II)						

#### **Permissible Operating Conditions**

Operating Temperature	-40°C to +85°C		
Temp coefficient of Open Circuit Voltage	-0.23 %/°C	-0.3%/℃	
Temp coefficient of Short Circuit Current	0.07%/°C	+0.06%/℃	
Temp coefficient of Power	-0.29 %/°C	-0.35%/℃	

### Warranty and Certifications

Product Warranty**	5 Years	12 Years		
Performance Warranty**	Linear Performance Warranty for 25 Years with 3% for 1st year degradation and 0.70% from year 2 to 25			
Approvals and Certificates	BIS certified as per IS/IEC standards			

\*\* Refer to Luminous Warranty document for Terms and conditions. Technical specifications are subject to change without prior notice.

#### Solar Module Dimension

