

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.



25 Years
Performance Warranty



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

Innovative cell technology 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 P _{Max} (Wp) | 40 | 80 | 105 | 170 | 330 | 335 | 540 | 550 |
| Rated Module Voltage (V) | 12 | 12 | 12 | 12 | 24 | 24 | 24 | 24 |
| Maximum Power Voltage V _{mp} (V) | 18 | 18 | 18.05 | 18.86 | 38.03 | 38.08 | 41.92 | 41.95 |
| Maximum Power Current I _{mp} (A) | 2.23 | 4.4 | 5.82 | 9.02 | 8.68 | 8.80 | 12.89 | 13.12 |
| Open Circuit Voltage V _{oc} (V) | 22 | 22 | 22 | 23.01 | 45.53 | 46.02 | 49.40 | 49.80 |
| Short Circuit Current I _{sc} (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 |

*STC (1000W/m²), AM1.5, cell temperature 25°C. Power Tolerance : 0/+5%. Power measurement accuracy: ±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 | IP 65 | IP 67 | IP 67 | IP 67 |
| Cable & Connectors | 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 (Ethylene Vinyl Acetate) | | | | | | |
| Back Sheet | Composit Film | | | | | | |
| Maximum Surface Load Capacity | 5400 Pa (Pascals) | | | | | | |
| Application 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%/°C |
| Temp coefficient of Short Circuit Current | 0.07%/°C | +0.06%/°C |
| Temp coefficient of Power | -0.29%/°C | -0.35%/°C |

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

