

# MONO PERC HALF CUT SOLAR PANEL

## Designed For High Performance

Mono PERC half-cut solar panels consist of solar cells that are cut in half in order to improve the panel's performance and durability. When the panels are halved, the current also gets halved, which reduces the resistive losses and allows solar cells to produce more power. All this leads to increased efficiency and greater durability.



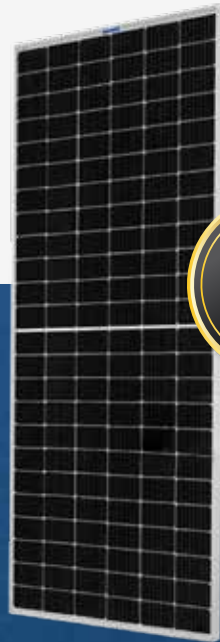
25 Years  
Performance Warranty



12 Years  
Product Warranty



Enlisted under  
ALMM Order



### Excellent Low-light Performance

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



### Functions like 2 parallel modules

Enables the module to perform in PARTIAL SHADOW CONDITIONS with respect to full-cell module



### Lower Resistive Losses

Boosts module power helping to achieve minimal power loss with respect to previous variant modules



### PID Resistance

Technology Designed to eliminate power loss owing to stray currents



### Space Efficient

They are space-efficient and require the least amount of space as compared to their counterparts.

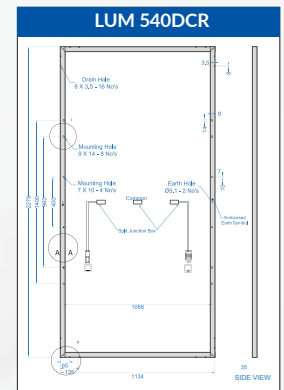
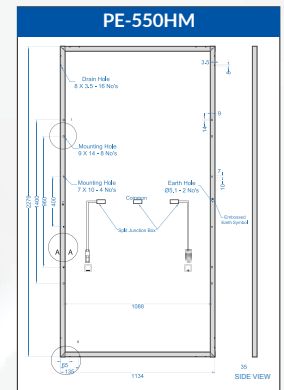
## Electrical Parameters @ STC<sup>#</sup>

Model ALMM Reference Model	LUM 540DCR	PE- 550HM
Cell Type	Mono PERC Half Cut	Mono PERC Half Cut
No. of Cells	144	144
Peak Power P <sub>Max</sub> (Wp)	540	550
Rated Module Voltage (V)	24	24
Maximum Power Voltage V <sub>mp</sub> (V)	41.92	41.95
Maximum Power Current I <sub>mp</sub> (A)	12.89	13.12
Open Circuit Voltage V <sub>oc</sub> (V)	49.40	49.80
Short Circuit Current I <sub>sc</sub> (A)	13.72	13.98
Module Efficiency (%)	20.89%	21.28%
Maximum System Voltage (V)	1500V	1500V
Maximum Series Fuse Rating	25A	25A

<sup>#</sup>STC (1000W/m<sup>2</sup>), 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

## Solar Module Dimension



## Mechanical Data

Module Dimensions (mm) LxWxT	2279x1134 x35
Module Weight (kgs)	29
IP Rating	IP 67
Cable	400mm length cables
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	Composite 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	-0.3%/°C
Temp coefficient of Short Circuit Current	+0.06%/°C
Temp coefficient of Power	-0.35%/°C

## Warranty and Certifications

Product Warranty**	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.