

# POWER<sup>®</sup> SERIES 5

## 500-560 W Mono

M5/156 mm Cell . 96 Cell Layout



**POWER<sup>®</sup> Series 5** solar modules stand out with the breakthrough innovation of M 9 size (166mm) solar cells for the highest power generation and the lowest LCOE, which makes Series 5 the optimal choice for large solar power plants. The gallium-doped wafer technology empowers significantly the performance against LID and the latest integrated segmented ribbon technology increases the power output and enhances the module reliability for long-term use.



Gallium-doped Technology



Half Cut Cell Technology



MBB Technology



Anti-PID  
Low LID  
Performance

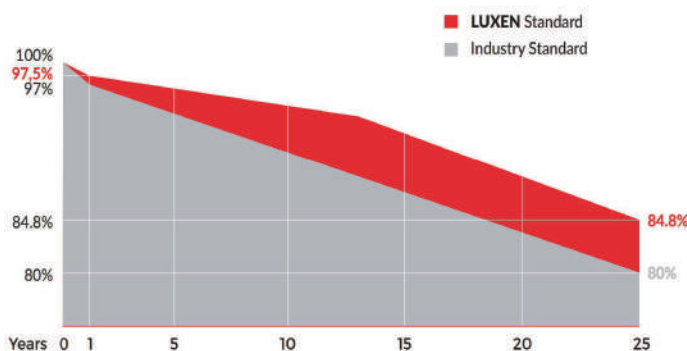


Less Hot Spot  
Shading Effects



Lower BOS & LCOE

### Linear performance Warranty



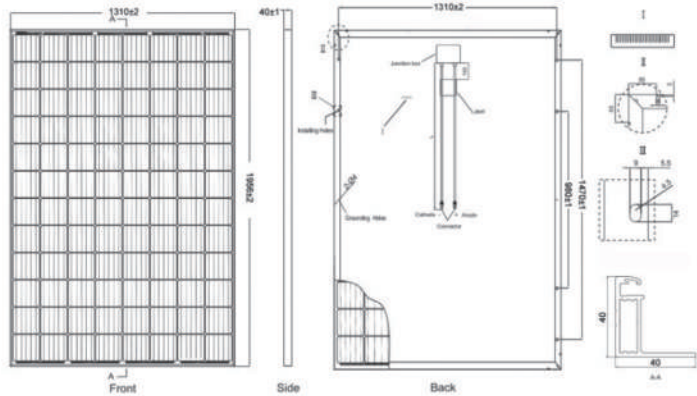
### Comprehensive Certificates

- ISO9001:2015 QMS
- ISO14001:2015 EMS
- ISO45001:2018 OHSMS
- IEC61215/IEC61730 Standard quality



## MECHANICAL CHARACTERISTICS

|                      |                               |
|----------------------|-------------------------------|
| Solar Cells          | Mono                          |
| No. of Cells         | 96                            |
| Dimensions           | 1950X1310X35mm                |
| Weight               | 28.5kgs                       |
| Front Glass          | 3.2mm coated tempered glass   |
| Frame                | Anodized aluminium alloy      |
| Junction Box         | Ip68 rated (3 by pass diodes) |
|                      | 4.0mm <sup>2</sup>            |
| Output Cables        | 300mm (+) / 400mm (-)         |
|                      | Length can be customized      |
| Connectors           | Mc4 compatible                |
| Mechanical load test | 5400Pa                        |



## ELECTRICAL PARAMETERS

| POWER CLASS                     | LNVH-575M |        | LNVH-580M |        | LNVH-585M |        | LNVH-600M |        | LNVH-620M |        |
|---------------------------------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|
|                                 | STC       | NOCT   | STC       | NOCT   | STC       | NOCT   | STC       | NOCT   | STC       | NOCT   |
| Maximum power (Pmax)            | 500W      | 437W   | 520W      | 441W   | 540W      | 445W   | 550W      | 449W   | 560W      | 453W   |
| Open Circuit Voltage (Voc)      | 51.02V    | 49.25V | 51.15V    | 49.47V | 51.29V    | 49.69V | 51.45V    | 49.91V | 51.55V    | 50.13V |
| Short Circuit Current (Isc)     | 14.25A    | 11.27A | 14.32A    | 11.31A | 14.39A    | 11.35A | 14.48A    | 11.39A | 14.53A    | 11.43A |
| Voltage at Maximum power (Vmpp) | 54.5V     | 41.03V | 55.0V     | 41.25V | 56.1V     | 41.47V | 56.5V     | 41.69V | 56.9V     | 41.91V |
| Current Maximum Power (Impp)    | 9.17A     | 10.65A | 9.24A     | 10.69A | 9.63A     | 10.73A | 9.73A     | 10.77A | 9.84A     | 10.81A |
| MODULE EFFICIENCY (%)           | 20.57%    |        | 20.75%    |        | 20.93%    |        | 21.11%    |        | 21.29%    |        |

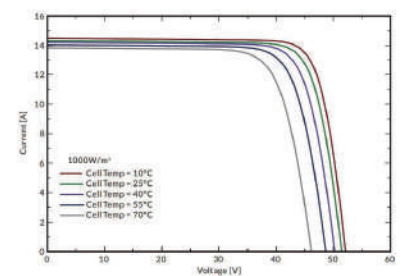
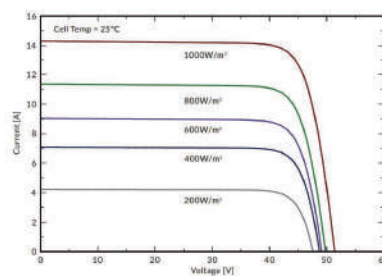
STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G      NOCT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s, AM1.5G

## PACKING CONFIGURATION

|                       |       |       |
|-----------------------|-------|-------|
| Container             | 20'GP | 40'HQ |
| Pieces per pallet     | 31    | 31    |
| Pallets per container | 4     | 18    |
| Pieces per container  | 124   | 558   |

## I-V CURVE

## LNVH-585M/I-V



## OPERATING CHARACTERISTICS

|                              |                |
|------------------------------|----------------|
| Operating Module Temperature | -40°C to +85°C |
| Maximum System Voltage       | 1500 DC (IEC)  |
| Maximum Series Fuse Rating   | 25A            |
| Power Tolerance              | 0/+5W          |

## TEMPERATURE CHARACTERISTICS

|                                      |           |
|--------------------------------------|-----------|
| Nominal Operating Temperature (Noct) | 45±2°C    |
| Temperature Coefficient of Pmax      | -0.36%/°C |
| Temperature Coefficient of Voc       | -0.28%/°C |
| Temperature Coefficient of Isc       | +0.05%/°C |

**Note:** Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. HL SOLAR have the sole right to make such modification at anytime without further notice.