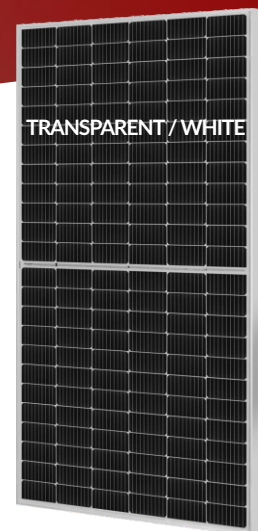


# LUXPOWER® SERIES 4

## 430-450W Mono BIFACIAL DG

### 144 Half-Cell Layout

M6/166mm Cell



Bifacial Cell  
Module Technologies



Gallium-doped Technology



Half Cut Cell Technology



Anti-PID  
Low LID  
Performance

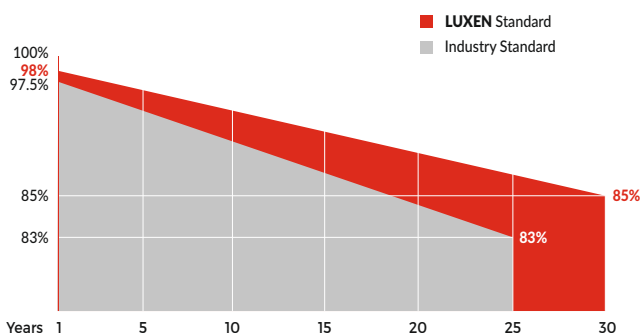


Less Hot Spot  
Shading Effects



Enduring High  
Reliability & Performance

### Linear Performance Warranty



\* LUXEN PERC: Standard warranty 12 years, can be extended up to 15 years.

### Insured By



### Comprehensive Certificates

- ISO9001:2015 QMS
- ISO14001:2015 EMS
- ISO45001:2018 OHSMS
- IEC61215/IEC61730 Standard Quality
- IEC61701/IEC62716 Salt/Mist/Ammonia Tests



LUXEN SOLAR ENERGY CO., LTD.

Operational HQ: Vienna Technology Center, Christine-Touaillon-Strasse 11/2.01, 1220 Vienna, Austria

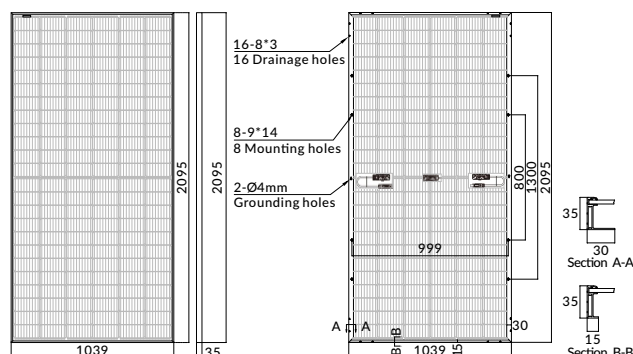
Production HQ: No.1, Haiyue Road, Nantong, Jiangsu, 226000, China

europa@luxensolar.at

www.luxensolar.com

## MECHANICAL CHARACTERISTICS

|                      |                                  |
|----------------------|----------------------------------|
| Solar Cells          | Mono                             |
| No. of Cells         | 144 (6x24)                       |
| Dimensions           | 2095 x 1039 x 30mm               |
| Weight               | 25.5kg                           |
| Front Glass          | 2.0mm coated semi-tempered glass |
| Back Glass           | 2.0mm semi-tempered glass        |
| Junction Box         | Ip68 rated (3 by pass diodes)    |
|                      | 4.0mm <sup>2</sup>               |
| Output Cables        | 300mm (+) / 300mm (-)            |
|                      | Length can be customized         |
| Connectors           | Mc4 compatible                   |
| Mechanical load test | 5400Pa                           |



## ELECTRICAL PARAMETERS

| POWER CLASS                     | LNSU-430MD |        | LNSU-435MD |        | LNSU-440MD |        | LNSU-445MD |        | LNSU-450MD |        |
|---------------------------------|------------|--------|------------|--------|------------|--------|------------|--------|------------|--------|
|                                 | STC        | NMOT   | STC        | NMOT   | STC        | NMOT   | STC        | NMOT   | STC        | NMOT   |
| Maximum power (Pmax)            | 430W       | 321W   | 435W       | 325W   | 440W       | 329W   | 445W       | 333W   | 450W       | 337W   |
| Open Circuit Voltage (Voc)      | 49.20V     | 44.52V | 49.40V     | 44.86V | 49.60V     | 45.21V | 49.79V     | 45.55V | 49.98V     | 45.89V |
| Short Circuit Current (Isc)     | 11.30A     | 9.21A  | 11.36A     | 9.25A  | 11.42A     | 9.29A  | 11.48A     | 9.33A  | 11.54A     | 9.37A  |
| Voltage at Maximum power (Vmpp) | 40.60V     | 37.33V | 40.81V     | 37.62V | 41.01V     | 37.90V | 41.20V     | 38.19V | 41.40V     | 38.47V |
| Current Maximum Power (Impp)    | 10.59A     | 8.60A  | 10.66A     | 8.64A  | 10.73A     | 8.68A  | 10.80A     | 8.72A  | 10.87A     | 8.76A  |
| MODULE EFFICIENCY (%)           | 19.75%     |        | 19.98%     |        | 20.21%     |        | 20.44%     |        | 20.67%     |        |

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

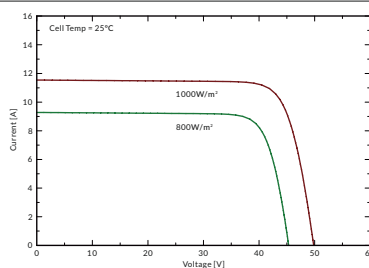
## BIFACIAL OUTPUT-REAR SIDE POWER GAIN

|     |                           |        |        |        |        |        |
|-----|---------------------------|--------|--------|--------|--------|--------|
| 5%  | Maximum power (Pmax)      | 452W   | 457W   | 462W   | 467W   | 473W   |
|     | Module Efficiency STC (%) | 20.74% | 20.98% | 21.22% | 21.47% | 21.71% |
| 15% | Maximum power (Pmax)      | 495W   | 500W   | 506W   | 512W   | 518W   |
|     | Module Efficiency STC (%) | 22.72% | 22.98% | 23.25% | 23.51% | 23.77% |
| 25% | Maximum Power (Pmax)      | 538W   | 544W   | 550W   | 556W   | 563W   |
|     | Module Efficiency STC (%) | 24.69% | 24.98% | 25.27% | 25.55% | 25.84% |

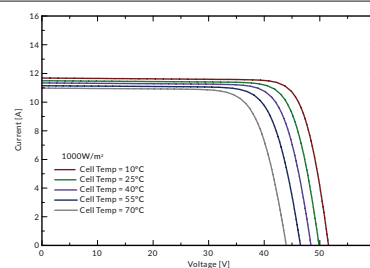
## PACKING CONFIGURATION

|                       |       |       |
|-----------------------|-------|-------|
| Container             | 20'GP | 40'HQ |
| Pieces per pallet     | 36    | 36    |
| Pallets per container | 5     | 22    |
| Pieces per container  | 180   | 792   |

## I-V CURVE



## LNSU-450MD/I-V



## OPERATING CHARACTERISTICS

|                              |                |
|------------------------------|----------------|
| Operating Module Temperature | -40°C to +85°C |
| Maximum System Voltage       | 1500 DC (IEC)  |
| Maximum Series Fuse Rating   | 20A            |
| Power Tolerance              | 0/+5W          |

## TEMPERATURE CHARACTERISTICS

|                                      |           |
|--------------------------------------|-----------|
| Nominal Operating Temperature (NMOT) | 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:** The specifications, data and technical characteristics provided in this data sheet are subject to changes due to continuous R&D, product innovation and improvement. LUXEN SOLAR reserves the right to modify the information any time without prior notice.