

# LUXPOWER® SERIES **N**5

## 570-590W Mono BIFACIAL DG

### 144 Half-Cell Layout

### M10 N-TYPE Cell



LECO N-TYPE Cell Technology



SMBB Half Cut Cell Technology



Bifacial Cell Module Technologies



Excellent Anti-PID Low LID Performance

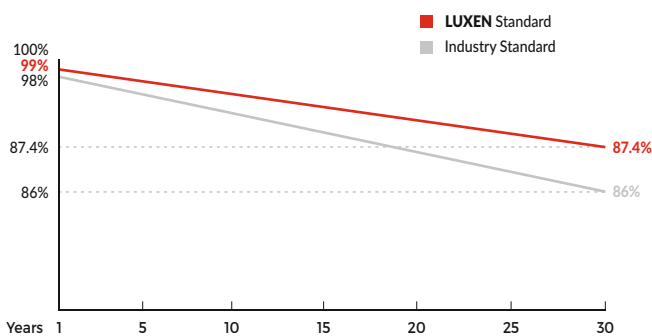


Less Hot Spot Shading Effects



Higher Power Output Lower BOS & LCOE

### Linear Performance Warranty



\* LUXEN N-TYPE: Standard warranty 15 years, can be extended up to 20 years.

### Insured By



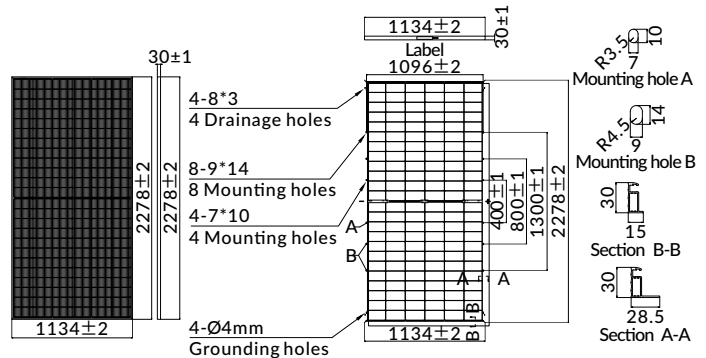
### Comprehensive Certificates

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



**MECHANICAL CHARACTERISTICS**

Solar Cells	N-type Mono
No. of Cells	144 (6x24)
Dimensions	2278 x 1134 x 30mm
Weight	31.5kg
Front / Back Glass	2.0mm coated semi-tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4.0mm <sup>2</sup> 1200mm (+) / 1200mm (-) Length can be customized
Connectors	Mc4 compatible
Mechanical load test	Front 5400Pa / Rear 2400Pa



**ELECTRICAL PARAMETERS**

POWER CLASS	LNVU-570ND		LNVU-575ND		LNVU-580ND		LNVU-585ND		LNVU-590ND	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	570W	429W	575W	433W	580W	437W	585W	441W	590W	445W
Open Circuit Voltage (Voc)	51.41V	48.69V	51.55V	48.82V	51.68V	48.96V	51.81V	49.09V	51.94V	49.23V
Short Circuit Current (Isc)	14.15A	11.41A	14.22A	11.47A	14.29A	11.53A	14.36A	11.59A	14.43A	11.65A
Voltage at Maximum power (Vmpp)	42.41V	39.36V	42.56V	39.51V	42.71V	39.66V	42.86V	39.80V	43.00V	39.95V
Current Maximum Power (Impp)	13.44A	10.90A	13.51A	10.96A	13.58A	11.02A	13.65A	11.08A	13.72A	11.14A
MODULE EFFICIENCY (%)	22.07%		22.26%		22.45%		22.65%		22.84%	

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

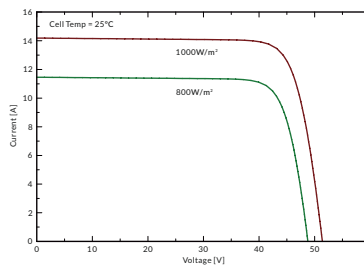
**BIFACIAL OUTPUT-REAR SIDE POWER GAIN**

Gain	Parameter	LNVU-570ND	LNVU-575ND	LNVU-580ND	LNVU-585ND	LNVU-590ND
5%	Maximum power (Pmax)	599W	604W	609W	614W	620W
	Module Efficiency STC (%)	23.17%	23.37%	23.57%	23.78%	23.98%
15%	Maximum power (Pmax)	656W	661W	667W	673W	679W
	Module Efficiency STC (%)	25.37%	25.60%	25.82%	26.04%	26.27%
25%	Maximum Power (Pmax)	713W	719W	725W	731W	738W
	Module Efficiency STC (%)	27.58%	27.82%	28.07%	28.31%	28.55%

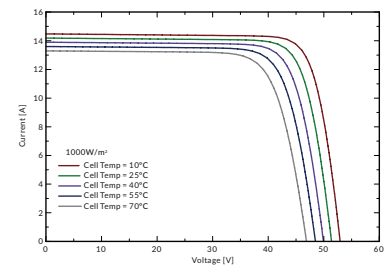
**PACKING CONFIGURATION**

Container	20'GP	40'HQ
Pieces per pallet	37	37
Pallets per container	5	20
Pieces per container	185	740

**I-V CURVE**



**LNVU-575ND/I-V**



**OPERATING CHARACTERISTICS**

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	30A
Power Tolerance	0/+5W

**TEMPERATURE CHARACTERISTICS**

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C

Note: The technical parameters included in this datasheet may have minor deviations, and Luxen does not guarantee absolute accuracy. Due to ongoing product innovation and enhancements, Luxen reserves the right to modify the information in this manual at any time without prior notice. Customers should obtain the latest version of the technical manual when signing the contract, and it shall be considered an integral part of the binding contract between the parties. Please note that qualified professionals should handle and install solar modules to ensure optimal module performance.