

LUXPOWER® SERIES **N**5



490-510W Mono BIFACIAL DG
108 Half-Cell Layout
G12R N-TYPE Cell

N-TYPE



LECO N-TYPE
Cell Technology



SMBB Half Cut
Cell Technology



Bifacial Cell
Module Technologies



Excellent
Anti-PID
Low LID
Performance

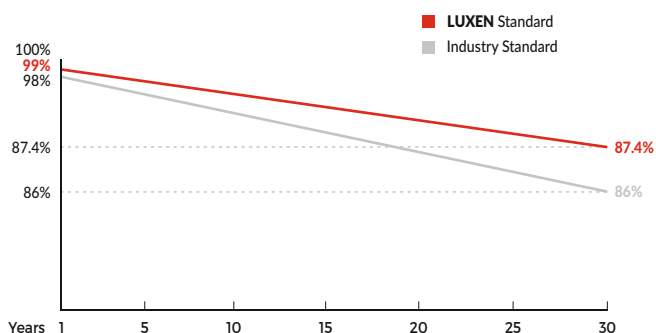


Less Hot Spot
Shading Effects



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



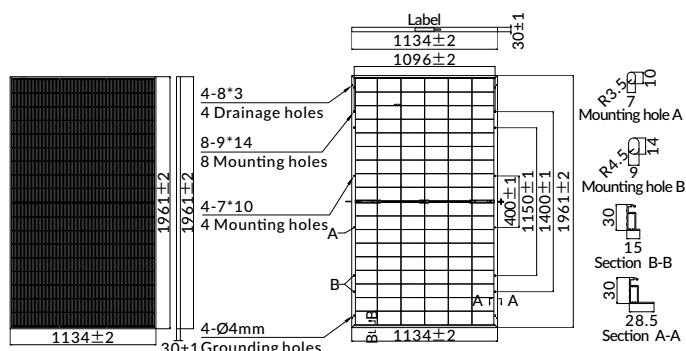
Comprehensive Certificates

- 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	108 (6x18)
Dimensions	1961 x 1134 x 30mm
Weight	27.5kg
Front / Back Glass	2.0mm coated semi-tempered glass
Frame	Anodized aluminium alloy (reinforced high-load optional)
Junction Box	Ip68 rated (3 by pass diodes)
	4.0mm ²
Output Cables	250mm (+) / 350mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	Front 5400Pa / Rear 2400Pa



ELECTRICAL PARAMETERS

POWER CLASS	LNDB-490ND		LNDB-495ND		LNDB-500ND		LNDB-505ND		LNDB-510ND	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	490W	368W	495W	372W	500W	376W	505W	380W	510W	384W
Open Circuit Voltage (Voc)	39.55V	37.12V	39.78V	37.36V	40.00V	37.59V	40.22V	37.83V	40.44V	38.06V
Short Circuit Current (Isc)	15.72A	12.58A	15.78A	12.62A	15.84A	12.67A	15.90A	12.72A	15.96A	12.77A
Voltage at Maximum power (Vmpp)	33.11V	31.08V	33.31V	31.29V	33.51V	31.50V	33.71V	31.71V	33.91V	31.91V
Current Maximum Power (Impp)	14.80A	11.84A	14.86A	11.89A	14.92A	11.94A	14.98A	11.98A	15.04A	12.03A
MODULE EFFICIENCY (%)	22.03%		22.26%		22.48%		22.71%		22.93%	

STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5GNMOT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

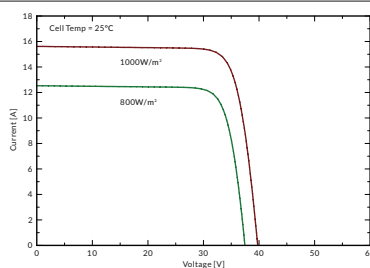
BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum power (Pmax)	515W	520W	525W	530W	536W
	Module Efficiency STC (%)	23.14%	23.37%	23.61%	23.84%	24.08%
15%	Maximum power (Pmax)	564W	569W	575W	581W	587W
	Module Efficiency STC (%)	25.34%	25.60%	25.86%	26.12%	26.37%
25%	Maximum Power (Pmax)	613W	619W	625W	631W	638W
	Module Efficiency STC (%)	27.54%	27.82%	28.11%	28.39%	28.67%

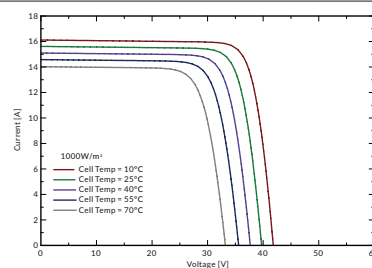
PACKING CONFIGURATION

Container	40'HQ
Pieces per pallet	37
Pallets per container	24
Pieces per container	888

I-V CURVE



LNDB-495ND/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.