

LUXPOWER® SERIES **N**5



490-510W Mono

108 Half-Cell Layout
G12R N-TYPE Cell

N-TYPE



LECO N-TYPE
Cell Technology



Half Cut Cell
Technology



SMBB Technology



Excellent
Anti-PID
Low LID
Performance

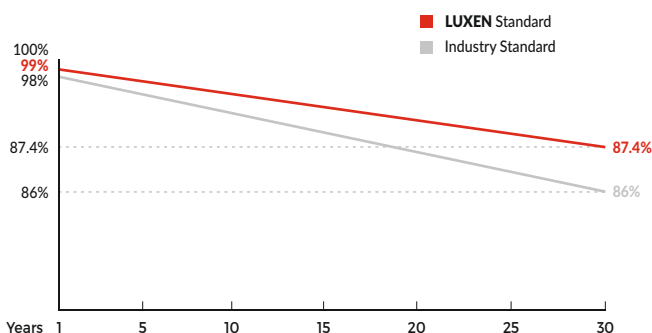


Less Hot Spot
Shading Effects



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



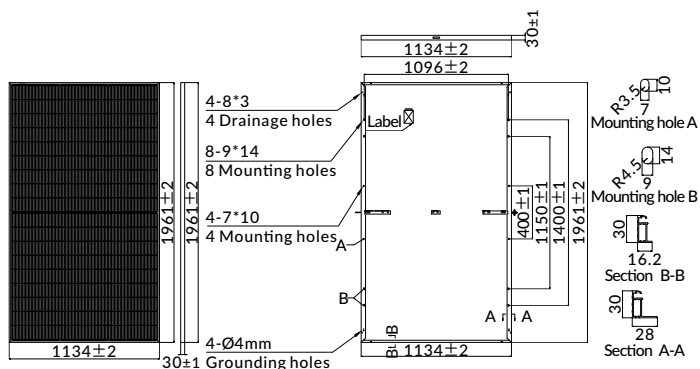
Comprehensive Certificates

- 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	23.5kg
Front Glass	3.2mm coated 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-490N		LNDB-495N		LNDB-500N		LNDB-505N		LNDB-510N	
	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)	39.45V	37.02V	39.68V	37.26V	39.90V	37.50V	40.12V	37.74V	40.34V	37.97V
Short Circuit Current (Isc)	15.76A	12.61A	15.82A	12.66A	15.88A	12.70A	15.94A	12.75A	16.00A	12.80A
Voltage at Maximum power (Vmpp)	33.02V	31.00V	33.22V	31.21V	33.42V	31.42V	33.62V	31.62V	33.82V	31.83V
Current Maximum Power (Impp)	14.84A	11.87A	14.90A	11.92A	14.96A	11.97A	15.02A	12.02A	15.08A	12.06A
MODULE EFFICIENCY (%)	22.03%		22.26%		22.48%		22.71%		22.93%	

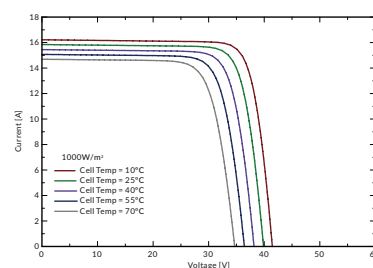
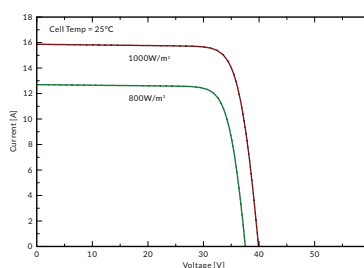
STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5GNMOT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

PACKING CONFIGURATION

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

I-V CURVE

LNDB-500N/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.