LUXEN SOLAR

Quality Maker

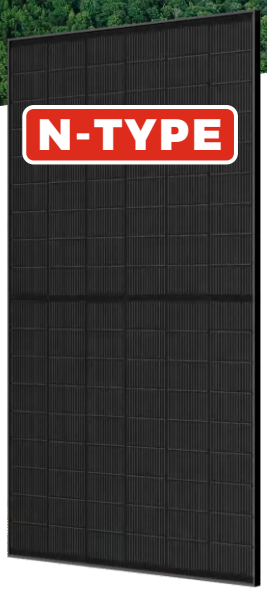
LUXNERI® SERIES N5

490-510W Mono

108 Half-Cell Layout

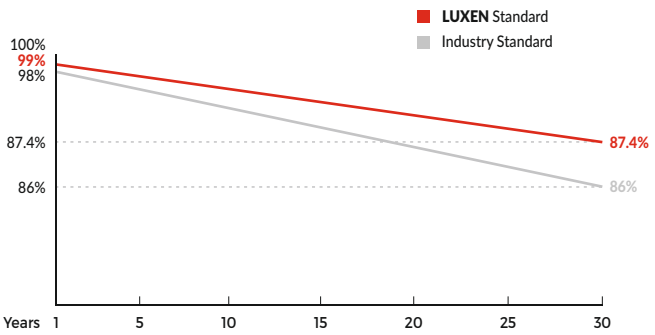
FULL BLACK BIFACIAL DG

G12R 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

China Continent Insurance · Ariel Re · LLOYD'S Underwriters · PICC

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.

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

T: +86 512 6708 1572 **I F:** +86 512 6708 1570 **I** sales@luxensolar.com

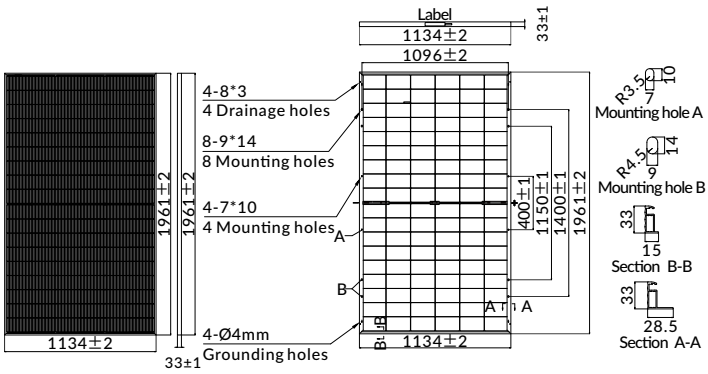
www.luxensolar.com

LUXNERI® Mono I 490 - 510W FULL BLACK BIFACIAL DG

Quality Maker

MECHANICAL CHARACTERISTICS

Solar Cells		N-type Mono
No. of Cells		108 (6x18)
Dimensions		1961 x 1134 x 33mm
Weight		27.8kg
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)
Output Cables		4.0mm²
		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, AM1.5G **NMOT:** Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s, AM1.5G

BIFACIAL OUTPUT-REARSIDE POWER GAIN

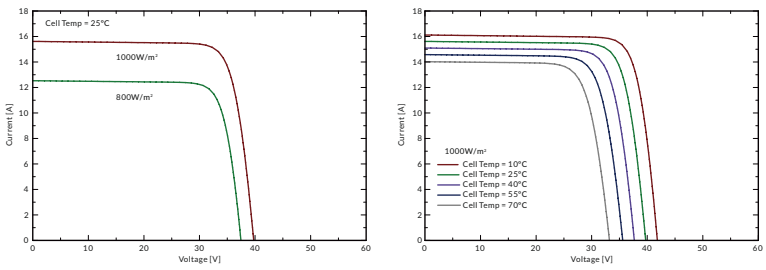
5%	Maximum power (Pmax)	515W	520W	525W	530W	536W
	Module Efficiency STC (%)	23.14%	23.37%	23.61%	23.84%	24.08%
15%	Maximum power (Pmax)	564W	569W	575W	581W	587W
	Module Efficiency STC (%)	25.34%	25.60%	25.86%	26.12%	26.37%
25%	Maximum Power (Pmax)	613W	619W	625W	631W	638W
	Module Efficiency STC (%)	27.54%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

PACKING CONFIGURATION

Container	40'HQ
Pieces per pallet	34
Pallets per container	24
Pieces per container	816

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.

LUXEN SOLAR