

LUXNERI® SERIES **N**5

435-455W Mono

96 Half-Cell Layout

G12R N-TYPE Cell

FULL BLACK BIFACIAL DG



LECO N-TYPE
Cell Technology



SMBB Half Cut
Cell Technology



Bifacial Cell
Module Technologies



Excellent
Anti-PID
Low LID
Performance



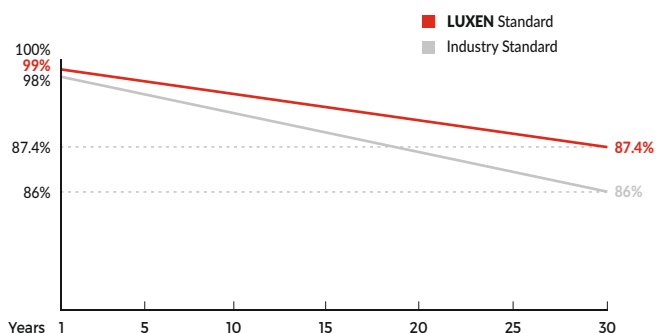
Less Hot Spot
Shading Effects



Higher Power Output
Lower BOS & LCOE

N-TYPE

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



LUXEN SOLAR ENERGY CO., LTD.

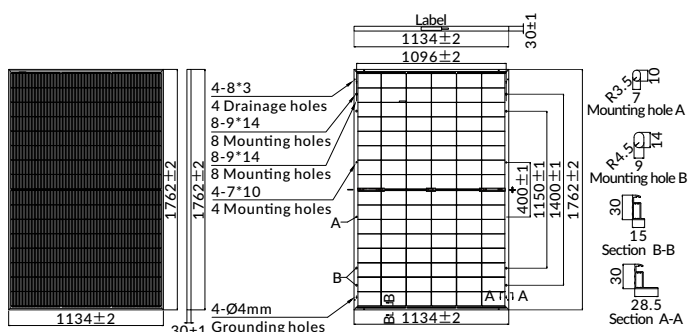
Production HQ: No.1, Haiyue Road, Nantong, Jiangsu, 226000, China

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

www.luxensolar.com

MECHANICAL CHARACTERISTICS

Solar Cells	N-type Mono
No. of Cells	96 (6x16)
Dimensions	1762 x 1134 x 30mm
Weight	24.0kg
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	1200mm (+) / 1200mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	Front 5400Pa / Rear 2400Pa



ELECTRICAL PARAMETERS

POWER CLASS	LNDX-435ND		LNDX-440ND		LNDX-445ND		LNDX-450ND		LNDX-455ND	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	435W	326W	440W	330W	445W	334W	450W	338W	455W	342W
Open Circuit Voltage (Voc)	34.49V	32.33V	34.74V	32.58V	34.97V	32.82V	35.21V	33.07V	35.45V	35.68V
Short Circuit Current (Isc)	15.84A	12.67A	15.90A	12.72A	15.96A	12.77A	16.02A	12.82A	16.08A	12.86A
Voltage at Maximum power (Vmpp)	29.43V	27.57V	29.65V	27.80V	29.87V	28.02V	30.08V	28.24V	30.29V	28.46V
Current Maximum Power (Impp)	14.78A	11.82A	14.84A	11.87A	14.90A	11.92A	14.96A	11.97A	15.02A	12.02A
MODULE EFFICIENCY (%)	21.77%		22.02%		22.27%		22.52%		22.77%	

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

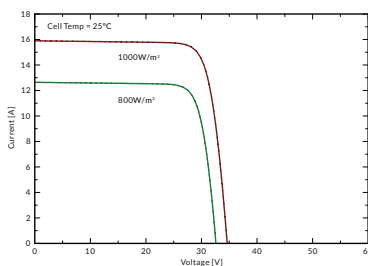
BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum power (Pmax)	457W	462W	467W	473W	478W
	Module Efficiency STC (%)	22.86%	23.12%	23.38%	23.65%	23.91%
15%	Maximum power (Pmax)	500W	506W	512W	518W	523W
	Module Efficiency STC (%)	25.04%	25.32%	25.61%	25.90%	26.19%
25%	Maximum Power (Pmax)	544W	550W	556W	563W	569W
	Module Efficiency STC (%)	27.21%	27.53%	27.84%	28.15%	28.46%

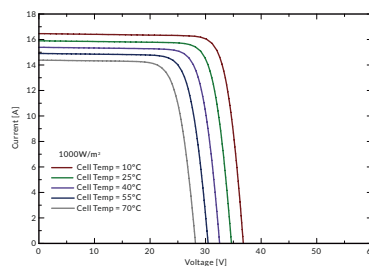
PACKING CONFIGURATION

Container	40'HQ
Pieces per pallet	37
Pallets per container	26
Pieces per container	962

I-V CURVE



LNDT-440ND/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.