

LUXPOWER® SERIES **N**5



435-455W Mono BIFACIAL DG

96 Half-Cell Layout
G12R N-TYPE Cell



LECO N-TYPE
Cell Technology



SMBB Half Cut
Cell Technology



Bifacial Cell
Module Technologies



Excellent
Anti-PID
Low LID
Performance



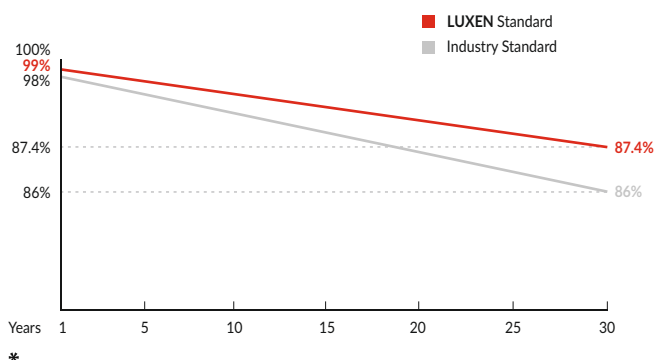
Less Hot Spot
Shading Effects



Higher Power Output
Lower BOS & LCOE



Linear Performance Warranty



Insured By



Comprehensive Certificates

- ISO9001:2015 QMS
- ISO14001:2015 EMS
- ISO45001:2018 OHSMS
- IEC61215:2021 / IEC61730:2023 Standard Quality



LUXEN SOLAR ENERGY CO., LTD.

Manufacturer add: A301, Building 6, Zhongyi Tower, No.59, Wuzhong Avenue, Wuzhong District, Suzhou City, Jiangsu Province, P.R.China

Factory add: No.1 Haiyue Road, Suxitong Technologies & Industries Park, Nantong City, Jiangsu Province, P.R.China

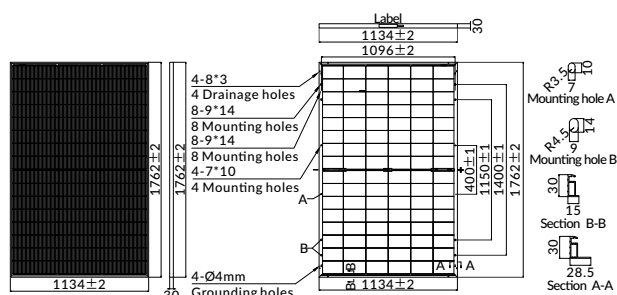
T: +86 512 6708 1572 | F: +86 512 6708 1570 | sales@luxensolar.com

www.luxensolar.com

Made in China

MECHANICAL CHARACTERISTICS

Solar Cells	N-TYPE Mono
No. of Cells	96 (6x16)
Dimensions	1762 x 1134 x 30mm
Weight	24.0kgs
Front/Black 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	Jiangsu Tonglin Electric Co., Ltd
	TL-CABLE01S Pro
Mechanical load test	Front 5400Pa / Rear 2400Pa
PV Module Fire Class	Fire safety class according to UL790: Class A



ELECTRICAL PARAMETERS

POWER CLASS	LNDX-435ND		LNDX-440ND		LNDX-445ND		LNDX-450ND		LNDX-455ND	
	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum power (Pmax)±3%	435W	482W	440W	488W	445W	493W	450W	499W	455W	504W
Open Circuit Voltage (Voc)±5%	34.49V	34.63V	34.74V	34.87V	34.97V	35.11V	35.21V	35.34V	35.45V	35.58V
Short Circuit Current (Isc)±5%	15.84A	17.49A	15.90A	17.55A	15.96A	17.62A	16.02A	17.69A	16.08A	17.75A
Voltage at Maximum power (Vmpp)	29.43V		29.65V		29.87V		30.08V		30.29V	
Current Maximum Power (Impp)	14.78A		14.84A		14.90A		14.96A		15.02A	
MODULE EFFICIENCY (%)	21.77%		22.02%		22.27%		22.52%		22.77%	

STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5G BNPI: The front irradiance is 1000W/m², the back irradiance is 135W/m², cell temperature is 25°C, AM1.5G

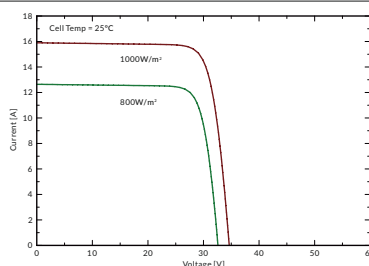
BIFACIAL OUTPUT-REAR SIDE POWER GAIN

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%

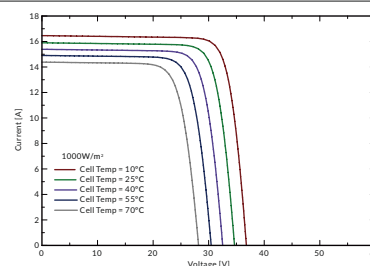
PACKING CONFIGURATION

Container	40'HQ
Pieces per pallet	36
Pallets per container	26
Pieces per container	936

I-V CURVE



LNDX-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 ~+3%

BIFACIALITY COEFFICIENT

φVoc /Tolerance ±5%	99%
φIsc /Tolerance ±10%	80%
φPmax /Tolerance ±10%	80%

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 specifications, data and technical characteristics provided in this data sheet are subject to changes due to continuous R&D, product innovation and improvement. LUXEN SOLAR reserves the right to modify the information any time without prior notice.