

# LUXNERI® SERIES 4

## 435-450W Mono ALL BLACK

### M6/166mm Cell . 144 Half-Cell Layout



Assembled with the M6 wafer based high efficiency cells, LUXNERI® Series 4 ALL BLACK solar modules combine the impressive aesthetic appearance with the innovative twin-panel design and the advanced technologies of half-cut cell, 9 busbars and round wire ribbon interconnection. The perfect visual effect, together with the high power generation performance and the reduced hot spot and shading risks, make it ideal for residential rooftop application.



Full Black Appearance for Aesthetic Effect



Gallium-doped Technology



Half Cut Cell Technology



Anti-PID Low LID Performance

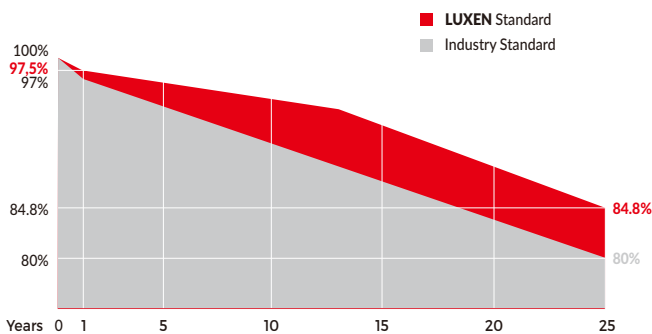


Less Hot Spot Shading Effects



Ideal for Residential Rooftop Application

### Linear performance Warranty



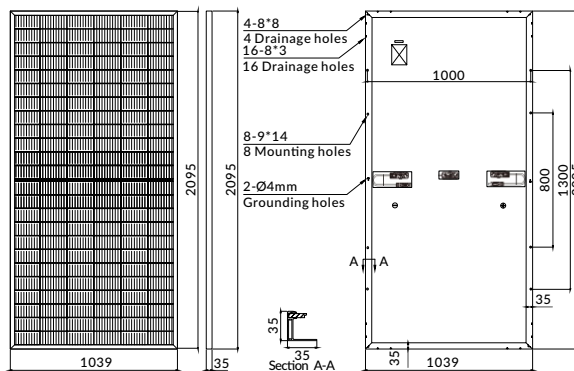
### Comprehensive Certificates

- ISO9001:2015 QMS
- ISO14001:2015 EMS
- ISO45001:2018 OHSMS
- IEC61215/IEC61730 Standard quality



**MECHANICAL CHARACTERISTICS**

Solar Cells	Mono
No. of Cells	144 (6x24)
Dimensions	2095 x 1039 x 35mm
Weight	23.0kgs
Front Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
	4.0mm <sup>2</sup>
Output Cables	300mm (+) / 300mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa



**ELECTRICAL PARAMETERS**

POWER CLASS	LNSU-435M		LNSU-440M		LNSU-445M		LNSU-450M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power (Pmax)	435W	321W	440W	324W	445W	327W	450W	330W
Open Circuit Voltage (Voc)	49.40V	45.48V	49.60V	45.51V	49.79V	45.54V	49.98V	45.56V
Short Circuit Current (Isc)	11.36A	9.09A	11.42A	9.16A	11.48A	9.22A	11.54A	9.29A
Voltage at Maximum power (Vmpp)	40.81V	37.56V	41.01V	37.67V	41.20V	37.77V	41.40V	37.88V
Current Maximum Power (Impp)	10.66A	8.55A	10.73A	8.60A	10.80A	8.66A	10.87A	8.71A
MODULE EFFICIENCY (%)	19.98%		20.21%		20.44%		20.67%	

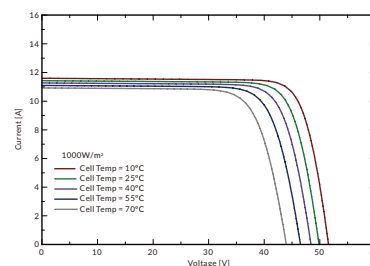
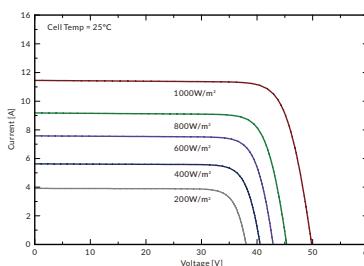
STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G      NOCT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s, AM1.5G

**PACKING CONFIGURATION**

Container	20'GP	40'HQ
Pieces per pallet	31	31
Pallets per container	5	22
Pieces per container	155	682

**I-V CURVE**

**LNSU-445M/I-V**



**OPERATING CHARACTERISTICS**

Operating Module Temperature	-40°C to + 85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	20A
Power Tolerance	0/+5W

**TEMPERATURE CHARACTERISTICS**

Nominal Operating Temperature (Noct)	45±2°C
Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	+0.05%/°C

**Note:** Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LUXEN SOLAR have the sole right to make such modification at anytime without further notice.