



Neptune N-TOPCon

SERIES **N5**

EL-415~435N5-108H

435W

22.28%

0~+5W

Maximum Power Output

Maximum Module Efficiency

Power Output Tolerance

Product and Quality Certifications

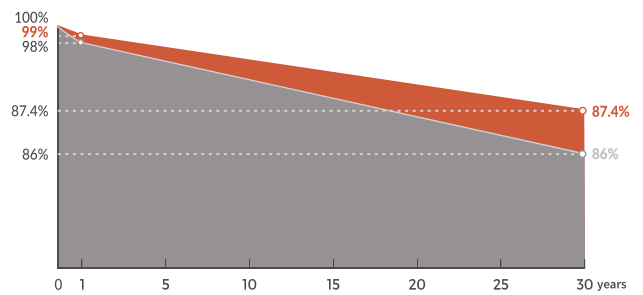
IEC 61215, IEC 61730

ISO 9001: 2015 Quality Management System

ISO 14001: 2015 Environment Management System

IEC 62716, IEC 61701: Ammonia, Salt mist corrosion test

IEC TS 62804-1, IEC 60068-2-68: PID test, Dust and Sand test



Standard linear power guarantee

East Lux linear power guarantee

Materials and workmanship warranty **15** YEAR

Linear power warranty **30** YEAR

Key Features



High Efficiency

Module efficiency leading in industry, up to 22.28%



Excellent Anti-PID & Low LID Performance

Excellent Anti-PID performance guarantee via optimized mass-production process. The N-type module has better reliability and lower LID/LETID.



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



Better Temperature Coefficient

Higher power output even under low-light environments like on cloudy or foggy days



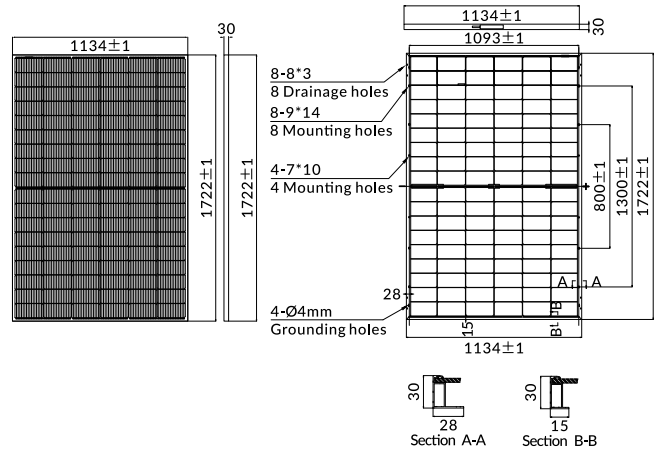
High Reliability

15 years materials warranty, 30 years power warranty

MECHANICAL CHARACTERISTICS

Solar Cells	N-type Mono
No. of Cells	108 (6x18)
Dimensions	1722 x 1134 x 30mm (35mm)
Weight	23.5kg
Front Glass	2.0mm coated semi-tempered glass
Back Glass	2.0mm semi-tempered glass
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4.0mm ²
Frame Size	300mm (+) / 300mm (-) or customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa

ENGINEERING DRAWING (MM)



ELECTRICAL PARAMETERS

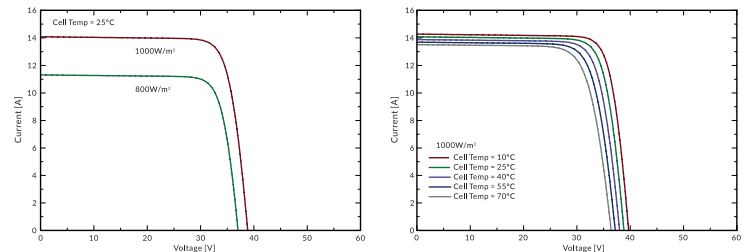
POWER CLASS	EL-415N5-108H		EL-420N5-108H		EL-425N5-108H		EL-430N5-108H		EL-435N5-108H	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	415W	311W	420W	315W	425W	319W	430W	323W	435W	327W
Open Circuit Voltage (Voc)	38.34V	36.54V	38.57V	36.74V	38.81V	36.95V	39.04V	37.15V	39.27V	37.35V
Short Circuit Current (Isc)	13.89A	11.18A	13.96A	11.24A	14.03A	11.30A	14.10A	11.36A	14.17A	11.42A
Voltage at Maximum power (Vmpp)	32.02V	29.45V	32.23V	29.66V	32.44V	29.87V	32.65V	30.07V	32.85V	30.28V
Current Maximum Power (Imp)	12.96A	10.56A	13.03A	10.62A	13.10A	10.68A	13.17A	10.74A	13.24A	10.80A
MODULE EFFICIENCY (%)	21.25%		21.51%		21.76%		22.02%		22.28%	

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

PACKING CONFIGURATION

Container	40'HC (30mm)	40'HC (35mm optional)
Pieces per pallet	36	31
Pallets per container	26	26
Pieces per container	936	806

CHARACTERISTIC CURVES (430W)



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