



Neptune N-TOPCon

SERIES **N5**

EL-410~430N5-108BH

430W

22.02%

0~+5W

Maximum Power Output | Maximum Module Efficiency | Power Output Tolerance

Product and Quality Certifications

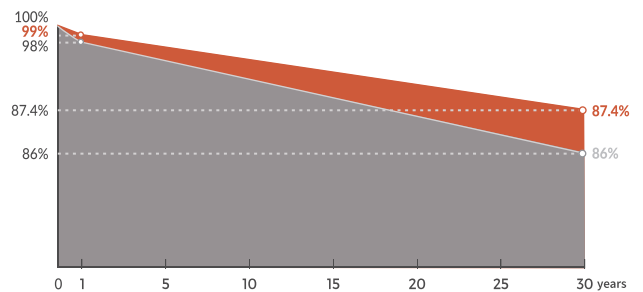
IEC 61215, IEC 61730

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 22.02%



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



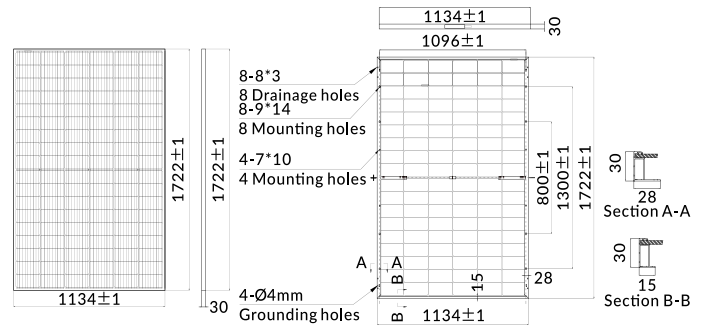
High Reliability

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
Weight	23.5kgs
Front Glass	2.0mm coated semi-tempered glass
Back Glass	2.0mm semi-tempered glass
Junction Box	Ip68 rated (3 by pass diodes)
	4.0mm ²
Output Cables	300mm (+) / 300mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa

ENGINEERING DRAWING (MM)



ELECTRICAL PARAMETERS

POWER CLASS	EL-410N5-108BH	EL-415N5-108BH	EL-420N5-108BH	EL-425N5-108BH	EL-430N5-108BH
	STC	STC	STC	STC	STC
Maximum power (Pmax)	410W	415W	420W	425W	430W
Open Circuit Voltage (Voc)	38.01V	38.25V	38.49V	38.73V	38.96V
Short Circuit Current (Isc)	13.85A	13.92A	13.99A	14.06A	14.13A
Voltage at Maximum power (Vmpp)	31.20V	31.42V	31.63V	31.84V	32.04V
Current Maximum Power (Impp)	13.14A	13.21A	13.28A	13.35A	13.42A
MODULE EFFICIENCY (%)	21.00%	21.25%	21.51%	21.76%	22.02%

STC: Irradiance 1000W/m², cell temperature 25°C, AM1.5G

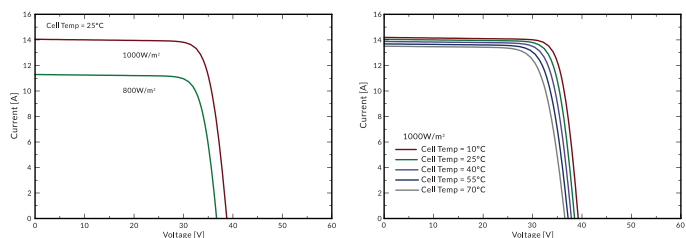
BIFACIAL OUTPUT-REAR SIDE POWER GAIN

%	Parameter	EL-410N5-108BH	EL-415N5-108BH	EL-420N5-108BH	EL-425N5-108BH	EL-430N5-108BH
		Maximum power (Pmax)	431W	436W	441W	446W
5%	Module Efficiency STC (%)	22.05%	22.31%	22.58%	22.85%	23.12%
15%	Maximum power (Pmax)	472W	477W	483W	489W	495W
	Module Efficiency STC (%)	24.15%	24.44%	24.73%	25.03%	25.32%
25%	Maximum Power (Pmax)	513W	519W	525W	531W	538W
	Module Efficiency STC (%)	26.25%	26.57%	26.89%	27.21%	27.53%

PACKING CONFIGURATION

Container	20'GP	40'HQ
Pieces per pallet	36	36
Pallets per container	6	26
Pieces per container	216	936

CHARACTERISTIC CURVES (425W)



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