



Neptune N-TOPCon

SERIES **N5**

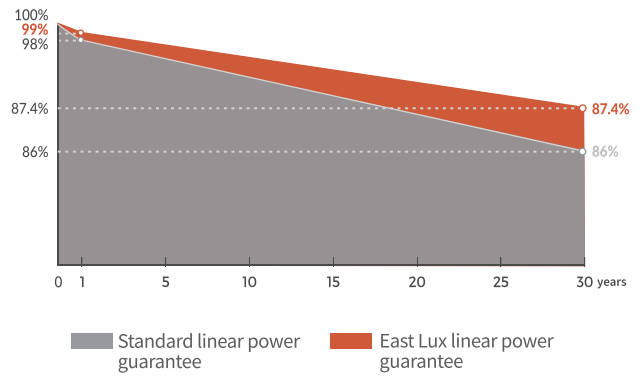
EL-415~435N5-108BH

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



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



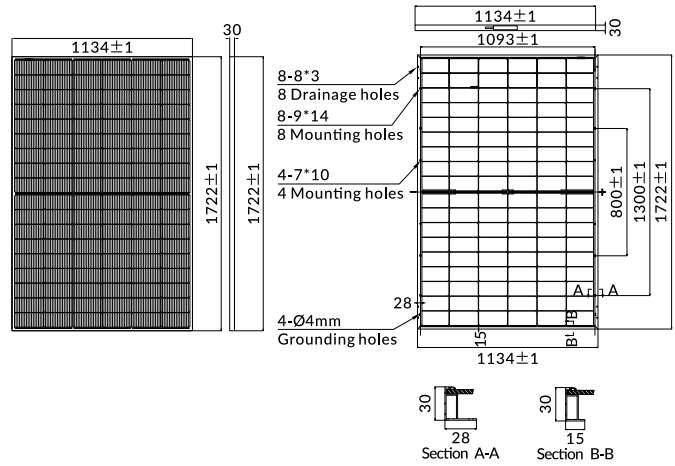
High Reliability

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	30mm (35mm optional)
Connectors	Mc4 compatible
Mechanical load test	5400Pa

ENGINEERING DRAWING (MM)



ELECTRICAL PARAMETERS

POWER CLASS	EL-415N5-108BH	EL-420N5-108BH	EL-425N5-108BH	EL-430N5-108BH	EL-435N5-108BH
	STC	STC	STC	STC	STC
Maximum power (P _{max})	415W	420W	425W	430W	435W
Open Circuit Voltage (V _{oc})	38.25V	38.49V	38.73V	38.96V	39.19V
Short Circuit Current (I _{sc})	13.92A	13.99A	14.06A	14.13A	14.20A
Voltage at Maximum power (V _{mpp})	31.42V	31.63V	31.84V	32.04V	32.25V
Current Maximum Power (I _{mp})	13.21A	13.28A	13.35A	13.42A	13.49A
MODULE EFFICIENCY (%)	21.25%	21.51%	21.76%	22.02%	22.28%

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

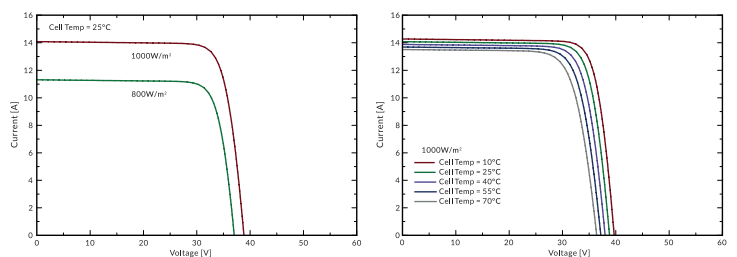
BIFACIAL OUTPUT-REAR SIDE POWER GAIN

		EL-415N5-108BH	EL-420N5-108BH	EL-425N5-108BH	EL-430N5-108BH	EL-435N5-108BH
		5%	Maximum power (P _{max})	436W	441W	446W
	Module Efficiency STC (%)	22.31%	22.58%	22.85%	23.12%	23.39%
15%	Maximum power (P _{max})	477W	483W	489W	495W	500W
	Module Efficiency STC (%)	24.44%	24.73%	25.03%	25.32%	25.62%
25%	Maximum Power (P _{max})	519W	525W	531W	538W	544W
	Module Efficiency STC (%)	26.57%	26.89%	27.21%	27.53%	27.85%

PACKING CONFIGURATION

	40'HC (30mm)	40'HC (35mm optional)
Container		
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 P _{max}	-0.29%/°C
Temperature Coefficient of V _{oc}	-0.25%/°C
Temperature Coefficient of I _{sc}	+0.045%/°C