



Neptune N-TOPCon

SERIES **N5**

EL-465~485N5-120H

485W

22.39%

0~+5W

Maximum Power Output | Maximum Module Efficiency | Power Output Tolerance

Product and Quality Certifications

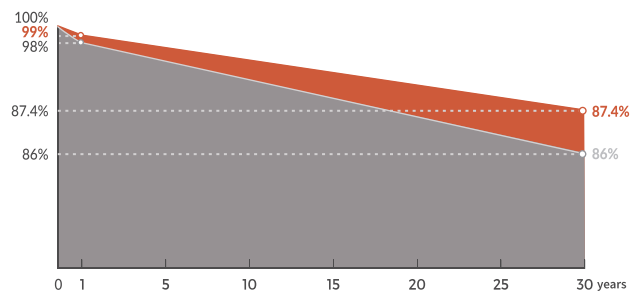
IEC 61215, IEC 61730

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 22.39%



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



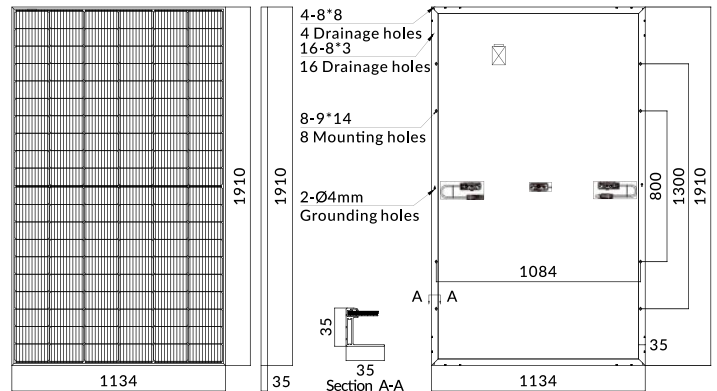
High Reliability

15 years materials warranty, 30 years power warranty

MECHANICAL CHARACTERISTICS

Solar Cells	N-type Mono
No. of Cells	120 (6x20)
Dimensions	1910 x 1134 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 ²
Output Cables	300mm (+) / 300mm (-)
	Length can be customized
Connectors	Mc4 compatible
Mechanical load test	5400Pa

ENGINEERING DRAWING (MM)



ELECTRICAL PARAMETERS

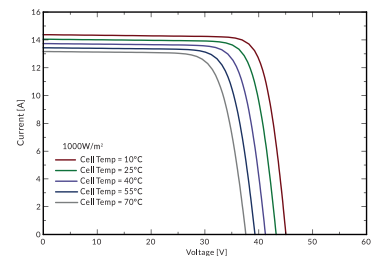
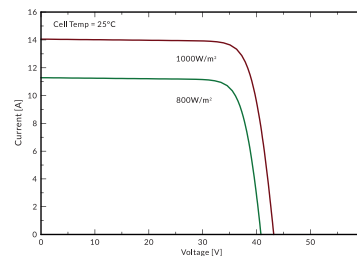
POWER CLASS	EL-465N5-120H		EL-470N5-120H		EL-475N5-120H		EL-480N5-120H		EL-485N5-120H	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	465W	349W	470W	353W	475W	357W	480W	361W	485W	365W
Open Circuit Voltage (Voc)	42.63V	40.63V	42.85V	40.81V	43.06V	40.99V	43.27V	41.17V	43.48V	41.35V
Short Circuit Current (Isc)	13.98A	11.26A	14.05A	11.32A	14.12A	11.38A	14.19A	11.44A	14.26A	11.50A
Voltage at Maximum power (Vmpp)	35.63V	32.80V	35.82V	32.99V	36.01V	33.18V	36.20V	33.36V	36.38V	33.55V
Current Maximum Power (Impp)	13.05A	10.64A	13.12A	10.70A	13.19A	10.76A	13.26A	10.82A	13.33A	10.88A
MODULE EFFICIENCY (%)	21.47%		21.70%		21.93%		22.16%		22.39%	

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	20'GP	40'HQ
Pieces per pallet	31	31
Pallets per container	6	24
Pieces per container	186	744

CHARACTERISTIC CURVES (475W)



OPERATING CHARACTERISTICS

Operating Module Temperature	-40°C to +85°C
Maximum System Voltage	1500 DC (IEC)
Maximum Series Fuse Rating	25A
Power Tolerance	0/+5W

TEMPERATURE CHARACTERISTICS

Nominal Operating Temperature (NMOT)	45±2°C
Temperature Coefficient of Pmax	-0.30%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.046%/°C