



# Neptune N-TOPCon

## SERIES N5

### EL-560~580N5-144H

**580W**

**22.44%**

**0~+5W**

Maximum Power Output | Maximum Module Efficiency | Power Output Tolerance

### Product and Quality Certifications

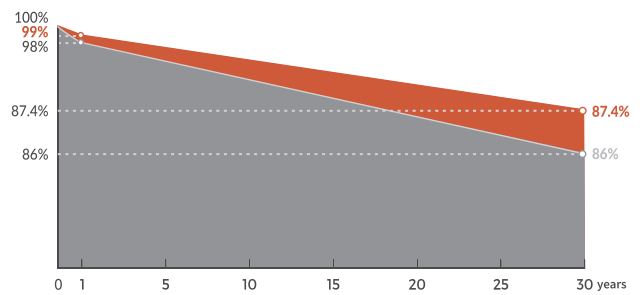
IEC 61215, IEC 61730

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 22.44%



#### 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



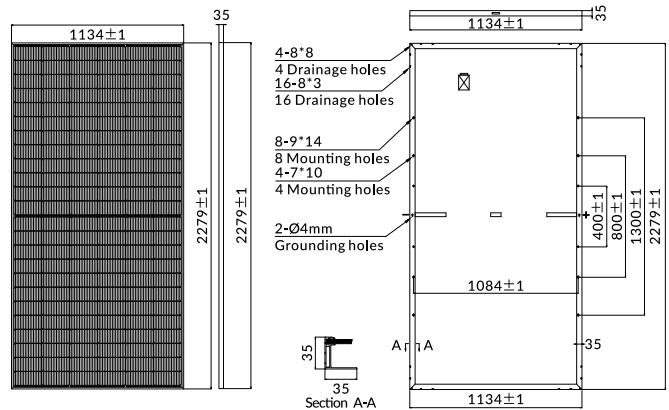
#### High Reliability

15 years materials warranty, 30 years power warranty

## MECHANICAL CHARACTERISTICS

Solar Cells	N-type Mono
No. of Cells	144 (6x24)
Dimensions	2279 x 1134 x 35mm (30mm)
Weight	27.5kg
Front Glass	3.2mm coated tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip68 rated (3 by pass diodes)
Output Cables	4.0mm <sup>2</sup>
	300mm (+) / 300mm (-) or customized
Frame Size	35mm (30mm optional)
Connectors	Mc4 compatible
Mechanical load test	5400Pa

## ENGINEERING DRAWING (MM)



## ELECTRICAL PARAMETERS

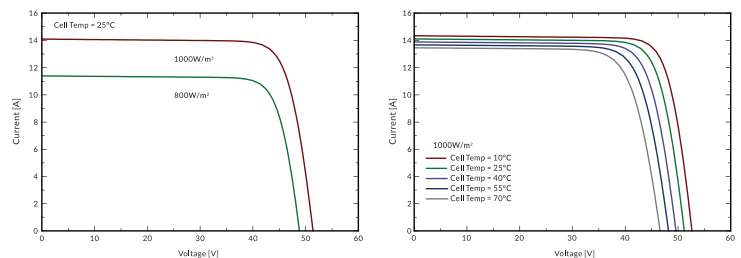
POWER CLASS	EL-560N5-144H		EL-565N5-144H		EL-570N5-144H		EL-575N5-144H		EL-580N5-144H	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum power (Pmax)	560W	421W	565W	425W	570W	429W	575W	433W	580W	437W
Open Circuit Voltage (Voc)	51.03V	48.41V	51.17V	48.60V	51.30V	48.78V	51.44V	48.96V	51.57V	49.14V
Short Circuit Current (Isc)	14.05A	11.33A	14.12A	11.39A	14.19A	11.45A	14.26A	11.51A	14.33A	11.57A
Voltage at Maximum power (Vmpp)	42.49V	39.31V	42.64V	39.46V	42.79V	39.61V	42.94V	39.76V	43.09V	39.91V
Current Maximum Power (Imp)	13.18A	10.71A	13.25A	10.77A	13.32A	10.83A	13.39A	10.89A	13.46A	10.95A
MODULE EFFICIENCY (%)	21.67%		21.86%		22.06%		22.25%		22.44%	

STC: Irradiance 1000W/m<sup>2</sup>, cell temperature 25°C, AM1.5G      NMOT: 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	20
Pieces per container	155	620

## CHARACTERISTIC CURVES (570W)



## 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	-0.29%/°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	+0.045%/°C