



# Neptune N-TOPCon

## SERIES **N5**

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

**580W**

**22.44%**

**0~+5W**

Maximum Power Output

Maximum Module Efficiency

Power Output Tolerance

#### Product and Quality Certifications

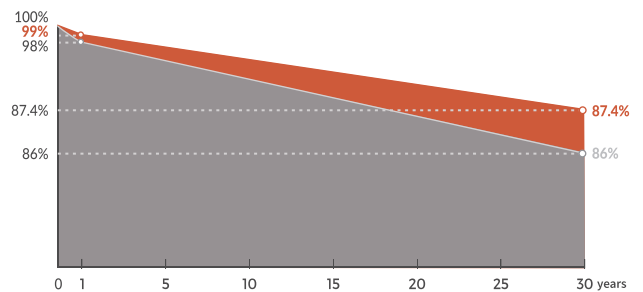
IEC 61215, IEC 61730

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 22.25%



#### 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



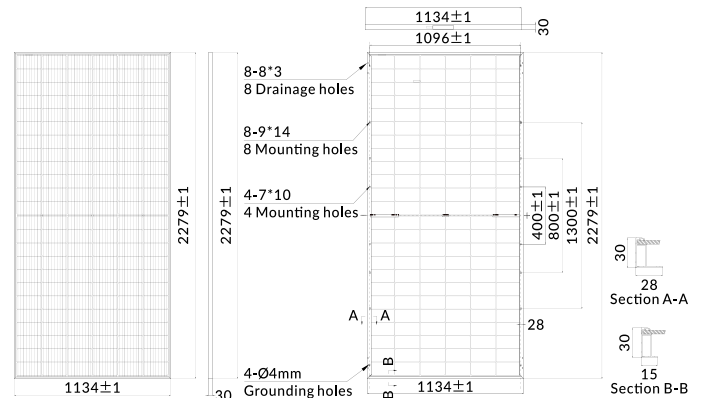
#### High Reliability

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 30mm (35mm)
Weight	31.5kgs
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 <sup>2</sup>
Output Cables	300mm (+) / 300mm (-)
	Length can be customized
Frame Size	30mm (35mm optional)
Connectors	Mc4 compatible
Mechanical load test	5400Pa

## ENGINEERING DRAWING (MM)



## ELECTRICAL PARAMETERS

POWER CLASS	EL-560N5-144BH	EL-565N5-144BH	EL-570N5-144BH	EL-575N5-144BH	EL-580N5-144BH
	STC	STC	STC	STC	STC
Maximum power (Pmax)	560W	565W	570W	575W	580W
Open Circuit Voltage (Voc)	51.14V	51.28V	51.41V	51.55V	51.68V
Short Circuit Current (Isc)	14.01A	14.08A	14.15A	14.22A	14.29A
Voltage at Maximum power (Vmpp)	42.11V	42.26V	42.41V	42.56V	42.71V
Current Maximum Power (Impp)	13.30A	13.37A	13.44A	13.51A	13.58A
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

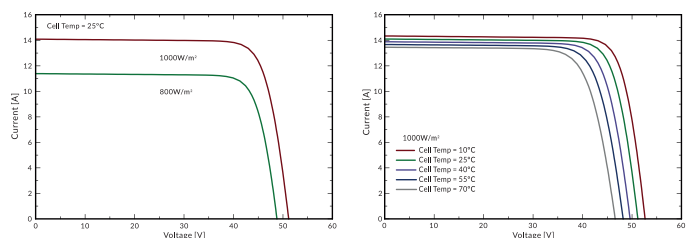
### BIFACIAL OUTPUT-REAR SIDE POWER GAIN

%	Parameter	EL-560N5-144BH	EL-565N5-144BH	EL-570N5-144BH	EL-575N5-144BH	EL-580N5-144BH
		Value	Value	Value	Value	Value
5%	Maximum power (Pmax)	588W	593W	599W	604W	609W
	Module Efficiency STC (%)	22.75%	22.96%	23.16%	23.36%	23.56%
15%	Maximum power (Pmax)	644W	650W	656W	661W	667W
	Module Efficiency STC (%)	24.92%	25.14%	25.36%	25.59%	25.81%
25%	Maximum Power (Pmax)	700W	706W	713W	719W	725W
	Module Efficiency STC (%)	27.09%	27.33%	27.57%	27.81%	28.05%

## PACKING CONFIGURATION

Container	40'HC (30mm)	40'HC (35mm optional)
Pieces per pallet	36	31
Pallets per container	20	20
Pieces per container	720	620

## CHARACTERISTIC CURVES (575W)



## 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