

# ELITE Series Bifacial

N-type cells with TOPCon Technology

425W / 430W / 435W



## 10-30% Additional Power Generation

10-30% additional power generation comparing with conventional P-type module



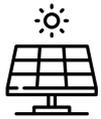
## ZERO LID (Light Induced Degradation)

N-type solar cell has no LID naturally which can increase power generation



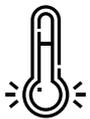
## Lower LCOE

Higher bifaciality factor of 80% ±5%, leading to higher power output and lower BOS cost



## Better Weak Illumination Response

Higher power output even under low-light environment



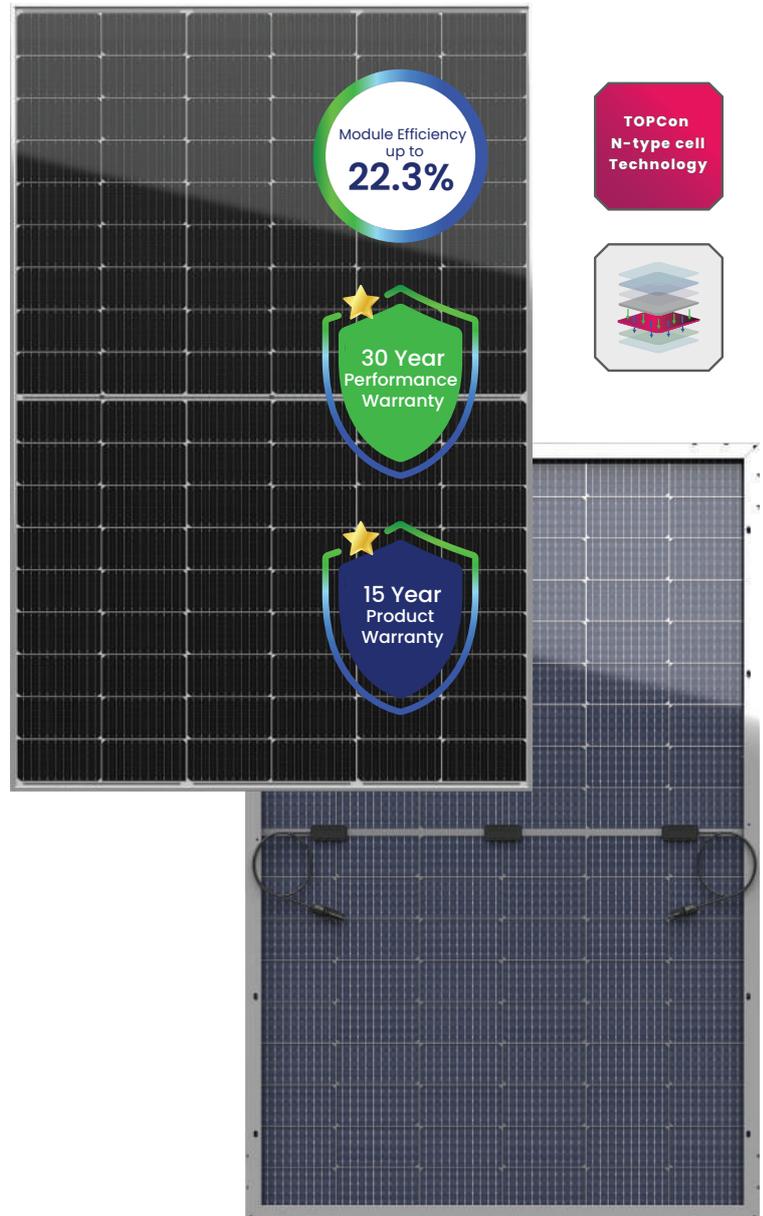
## Better Temperature Coefficient

Higher power generation under normal working conditions



## Enhanced Mechanical Load

Certified to withstand:  
Windload 2400 Pascal  
Snow load 5400 Pascal



## Testing & Certifications:

- ◆ IEC 61215: 2016
- ◆ IEC 61730: 2016 Latest Standard
- ◆ ISO 14001 and ISO 45001

Meeting the highest international standards for strict quality control



Designed & Engineered in the UK & Europe



(Warranty underwritten by)

[www.pernixenergy.com](http://www.pernixenergy.com)

[info@pernixenergy.com](mailto:info@pernixenergy.com)

Pernix Energy Ltd, 86 Paul Street, London, EC2A 4NE, UK



**PERNIX**  
ENERGY

# ELITE Series Bifacial

## Electrical Characteristics

Module	PX-54-182-N		
Maximum Power at STC* (Pmax)	425W	430W	435W
Open- Circuit Voltage (Voc)	38.2V	38.3V	38.4V
Short- Circuit Current (Isc)	14.15A	14.23A	14.31A
Optimum Operating Voltage (Vmp)	31.7V	31.9V	32.0V
Optimum Operating Current (Imp)	13.42A	13.50A	13.60A
Module efficiency	21.74%	21.99%	22.3%
Power Tolerance		0~+5W	
Maximum System Voltage		1500V DC (UL / IEC)	
Maximum Series Fuse Rating		25A	
Operating Temperature		-40 °C to + 85 °C	

\* STC: Irradiance 1000W/m<sup>2</sup>, module temperature 25, AM=1.5

## NMOT\*

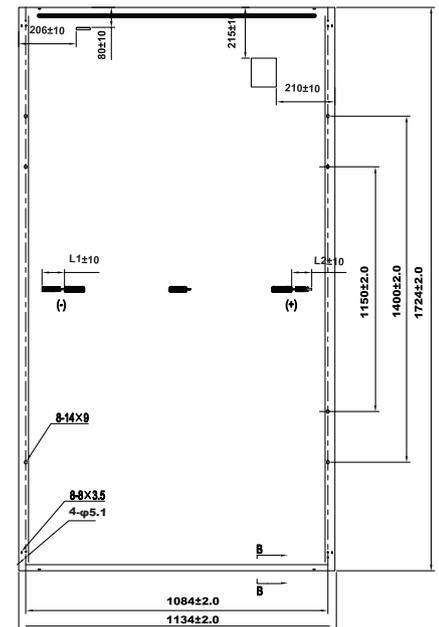
Module	PX-54-182-N		
Maximum Power	323W	327W	331W
Open- Circuit Voltage (Voc)	36.7V	36.8V	36.9V
Short- Circuit Current (Isc)	11.40A	11.47A	11.53A
Maximum Power Voltage (Vmp)	30.4V	30.7V	30.9V
Maximum Circuit Current (Imp)	10.62A	10.65A	10.71A
NMOT	45 ± 2 °C		

\* NMOT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1m/s

## Mechanical Characteristics

Solar Cells	N-Type (TOPCon) Technology Monocrystalline 182mm x 91mm
No. of Cells	108(6 x 18)
Dimensions	1724mm ±2mm x 1134mm ±2mm x 30mm
Weight	21.0kg
Front Glass	High transmission tempered glass; thickness; 3.2mm
Frame	Anodized aluminium alloy
Junction Box	IP68
Cable	4mm <sup>2</sup> (UL / IEC) length; (+) 400mm (-) 200mm / length can be customised
Connectors	MC <sub>4</sub> /MC <sub>4</sub> compatible
Packaging Configuration	36pcs / box, 936pcs / 40' HQ container

## Engineering Drawing



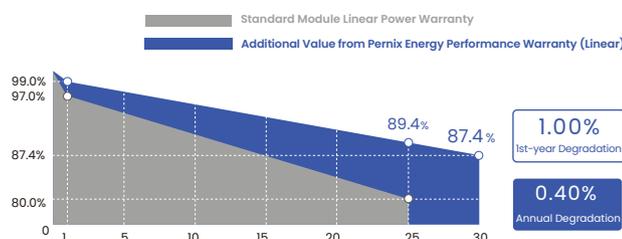
## Temperature Characteristics

Temperature Coefficient of Pmax	- 0.31% / °C
Temperature Coefficient of Voc	- 0.25% / °C
Temperature Coefficient of Isc	+ 0.046% / °C

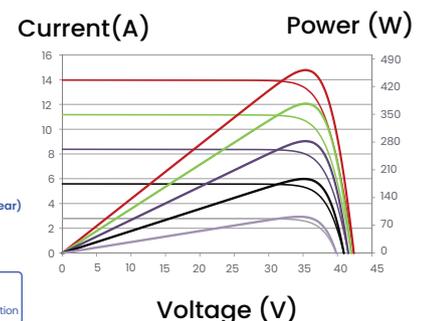
## Warranty\*

Performance Warranty	30 Years
Product Warranty	15 Years

\* Further information about the warranties can be found at [www.pernixenergy.com](http://www.pernixenergy.com)



## IV Curves



www.pernixenergy.com  
info@pernixenergy.com

Pernix Energy Ltd, 86 Paul Street, London, EC2A 4NE, UK