

N-TOPCon series

# 182 N-TOPCon Monofacial Module

**430W ~ 440W**



**12** years product workmanship warranty

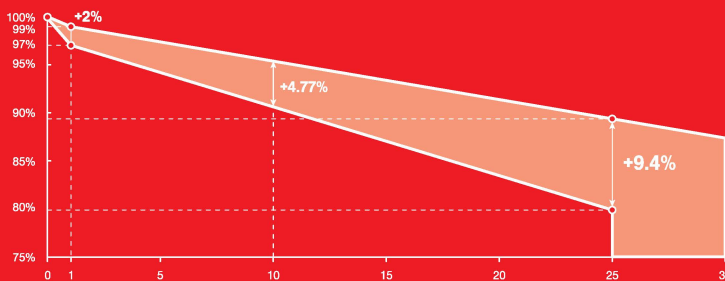


**30** years linear power output warranty



**1%** 1st-year degradation

**0.40%** annual degradation



Conventional LESSO Solar Module

## FEATURES AND BENEFITS



N-TOPCon brings 10-30% additional power generation comparing with conventional P-type module.



Higher power output even under low-light environments like on cloudy or foggy days.



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



Higher power generation under working conditions, thanks to passivating contact cell technology.



Higher bifaciality, higher power output and lower BOS cost.



More application scenes like BIPV, vertical installation, snowfield, high-humid, windy and dusty area.

# LESSO 182 N-TOPCon Monofacial Module



Power Range  
**430W ~ 440W**



Power Output Tolerance  
**0W ~ +5W**

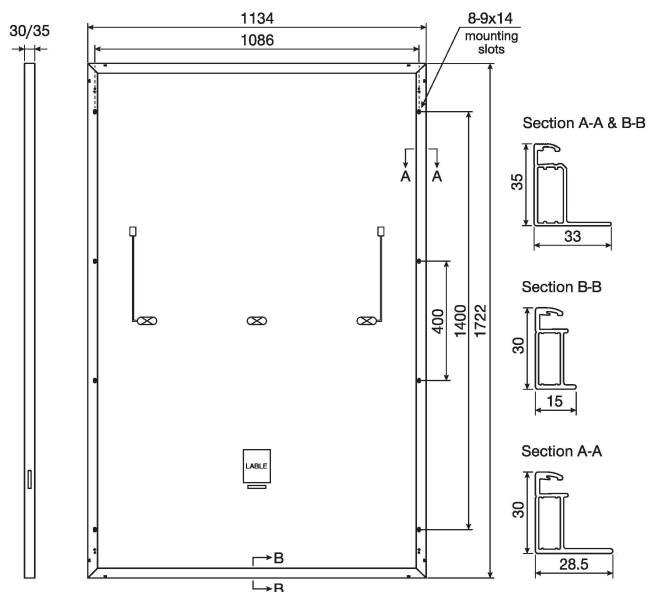


Maximum Efficiency  
**22.53%**

## Structure Performance

Solar Cell Type	182mm N-TOPCon Mono Cell (Half Cell)
Solar Cell Arrangement	108pcs(6×18)
Module Dimension	1722×1134×35mm/30mm
Weight	21.8kg(35mm) / 20.6kg(30mm)
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	White
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm <sup>2</sup> , portrait <sup>400mm (+)</sup> / <sub>200mm (-)</sub> , landscape <sup>1400mm (+)</sup> / <sub>1400mm (-)</sub> Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	PV-01 (Guangdong Lesso Electric Co., Ltd.)
Per Pallet	31pcs(35mm) / 36pcs(30mm)
Per Container(40'HQ)	806pcs(35mm) / 936pcs(30mm)
Fire Rating	Class C

(Unit: mm)



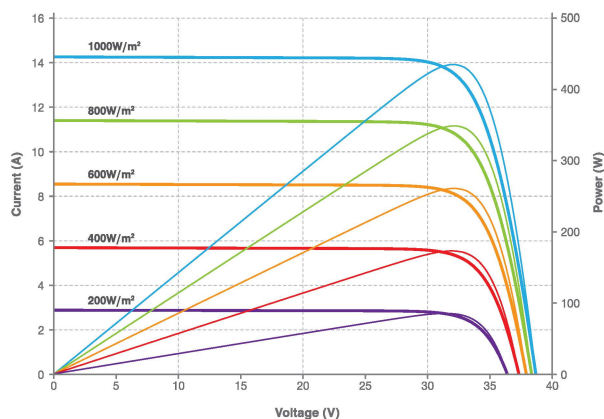
## Electrical Performance Parameters | STC

Model Type		430C(HPM) 54(182)	435C(HPM) 54(182)	440C(HPM) 54(182)
Nominal Max. Power	$P_{MAX}$ (W)	430	435	440
Max. Power Voltage	$V_{MP}$ (V)	32.00	32.18	32.35
Max. Power Current	$I_{MP}$ (A)	13.44	13.52	13.60
Open Circuit Voltage	$V_{OC}$ (V)	38.54	38.73	38.92
Short Circuit Current	$I_{SC}$ (A)	14.21	14.29	14.37
Module Efficiency	(%)	22.02	22.28	22.53
Power Output Tolerance	(W)		0~+5W	

\* STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5.

\* Power measurement tolerance ±3%.

## Current-Voltage & Power-Voltage Curve (435C)



## Electrical Performance Parameters | NMOT

Model Type		430C(HPM) 54(182)	435C(HPM) 54(182)	440C(HPM) 54(182)
Nominal Max. Power	$P_{MAX}$ (W)	323	327	331
Max. Power Voltage	$V_{MP}$ (V)	29.75	29.92	30.10
Max. Power Current	$I_{MP}$ (A)	10.86	10.93	11.00
Open Circuit Voltage	$V_{OC}$ (V)	36.61	36.79	36.97
Short Circuit Current	$I_{SC}$ (A)	11.49	11.56	11.63

\* NMOT: Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s, Air Mass AM1.5.

\* Power measurement tolerance ±3%.

## Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient ( $I_{SC}$ )	+0.043%
Temperature Coefficient ( $V_{OC}$ )	-0.25%
Temperature Coefficient ( $P_{MAX}$ )	-0.30%

## Maximum Parameters

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	25A

