

Pure Black **PRO** series

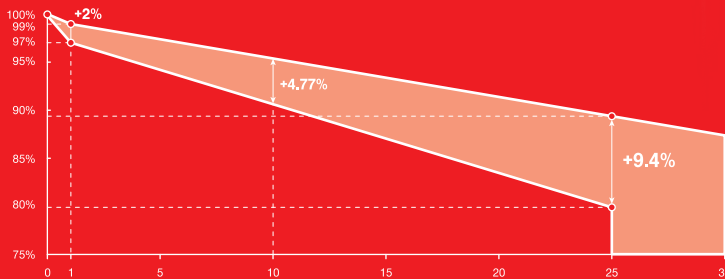
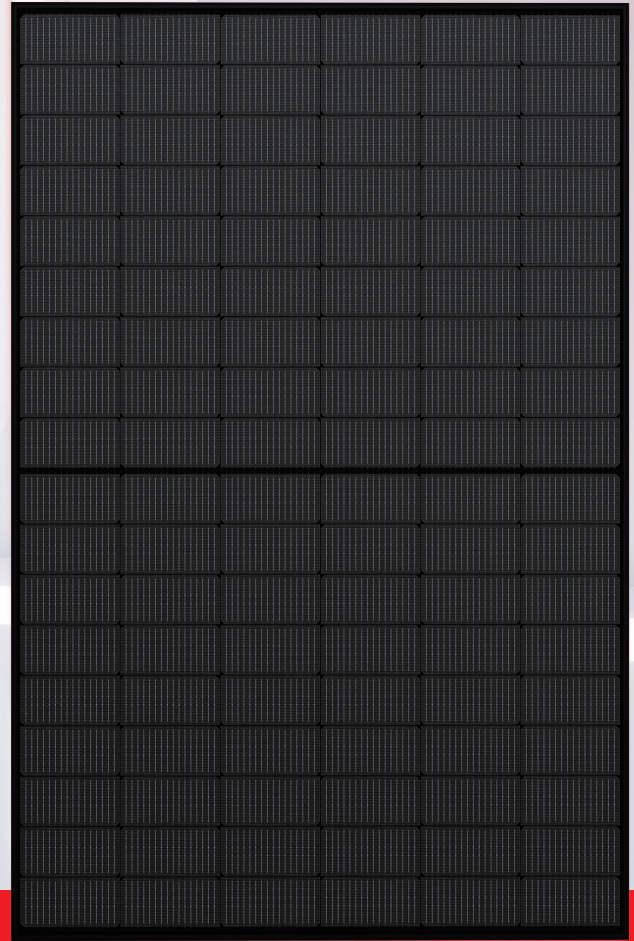
## 182 N-TOPCon Bifacial Module

**415W ~ 425W**

**12** years product workmanship warranty

**30** years linear power output warranty

**1%** 1st-year degradation  
**0.40%** annual degradation



### FEATURES AND BENEFITS

- N-TOPCon brings 10-30% additional power generation comparing with conventional P-type module.
- N-TOPCon solar cell has no LID naturally which can increase power generation.
- Higher bifaciality, higher power output and lower BOS cost.
- Double sides power output to reach higher comprehensive efficiency and get more profit.
- Higher power output even under low-light environments like on cloudy or foggy days.
- Higher power generation under working conditions, thanks to passivating contact cell technology.
- More application scenes like BIPV, vertical installation, snowfield, high-humid, windy and dusty area.

# LESSO 182 Pure Black N-TOPCon Bifacial Module



Power Range  
**415W ~ 425W**



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

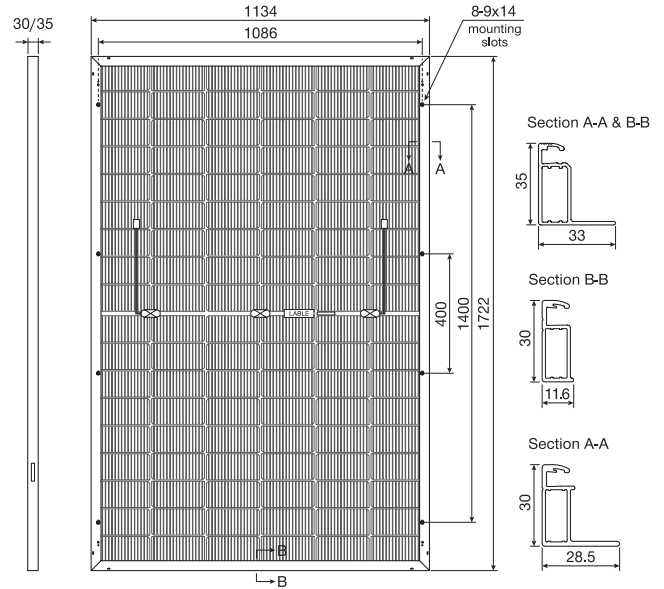


Maximum Efficiency  
**21.76%**

## 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	24.1kg(35mm) / 23.4kg(30mm)
Front Glass	2.0mm, highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy (Black)
Junction Box	IP68 rated
Cable	4mm <sup>2</sup> , portrait $\begin{matrix} 400mm (+) \\ 200mm (-) \end{matrix}$ , landscape $\begin{matrix} 1400mm (+) \\ 1400mm (-) \end{matrix}$ Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	MC4 Compatible
Per Pallet	31pcs(35mm) / 36pcs(30mm)
Per Container(40'HQ)	806pcs(35mm) / 936pcs(30mm)

(Unit: mm)

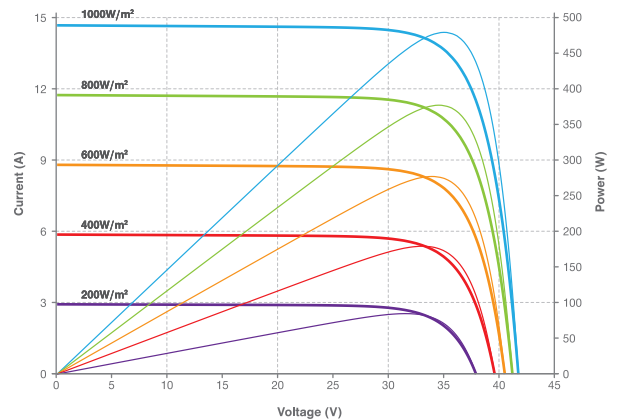


## Electrical Performance Parameters | STC

Model Type	415C(BBD) 54(182)	420C(BBD) 54(182)	425C(BBD) 54(182)	
Nominal Max. Power	P <sub>max</sub> (W)	415	420	425
Max. Power Voltage	V <sub>mp</sub> (V)	31.00	31.23	31.46
Max. Power Current	I <sub>mp</sub> (A)	13.39	13.45	13.51
Open Circuit Voltage	V <sub>oc</sub> (V)	36.55	36.75	36.95
Short Circuit Current	I <sub>sc</sub> (A)	14.64	14.70	14.76
Module Efficiency	(%)	21.25	21.51	21.76
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 (480C)



## Electrical Performance Parameters | NMOT

Model Type	415C(BBD) 54(182)	420C(BBD) 54(182)	425C(BBD) 54(182)	
Nominal Max. Power	P <sub>max</sub> (W)	311	315	319
Max. Power Voltage	V <sub>mp</sub> (V)	29.23	29.44	29.65
Max. Power Current	I <sub>mp</sub> (A)	10.64	10.70	10.76
Open Circuit Voltage	V <sub>oc</sub> (V)	34.10	34.28	34.47
Short Circuit Current	I <sub>sc</sub> (A)	11.87	11.92	11.97

\* NMOT: Irradiance 800W/m<sup>2</sup>, Cell Temperature 20°C, Wind Speed 1m/s.  
\* Power measurement tolerance ±3%.

## Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient (I <sub>sc</sub> )	+0.043%
Temperature Coefficient (V <sub>oc</sub> )	-0.25%
Temperature Coefficient (P <sub>max</sub> )	-0.30%

## Maximum Parameters

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	30A