

Pure Black **PRO** series

## 182 N-TopCon Bifacial Module

**465W ~ 475W**



**12** years product workmanship warranty

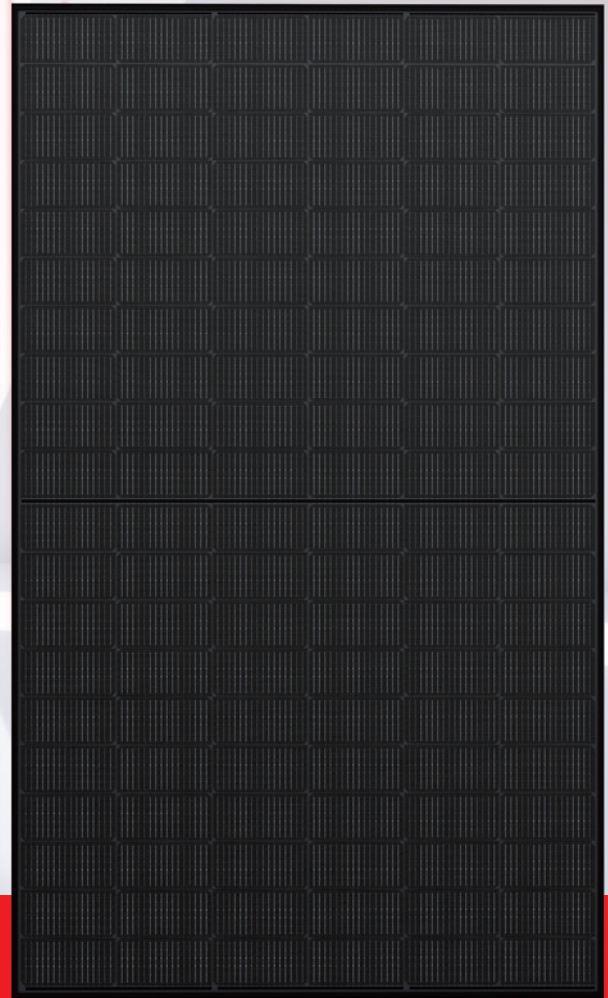
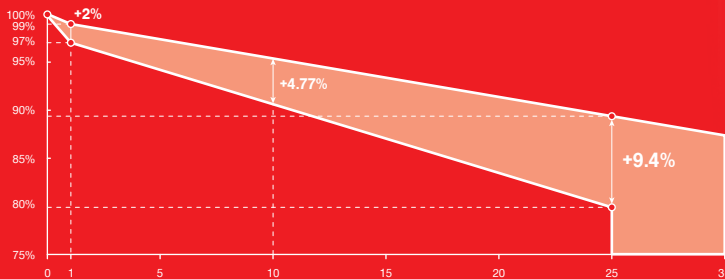


**30** years linear power output warranty



**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  
**465W ~ 475W**



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

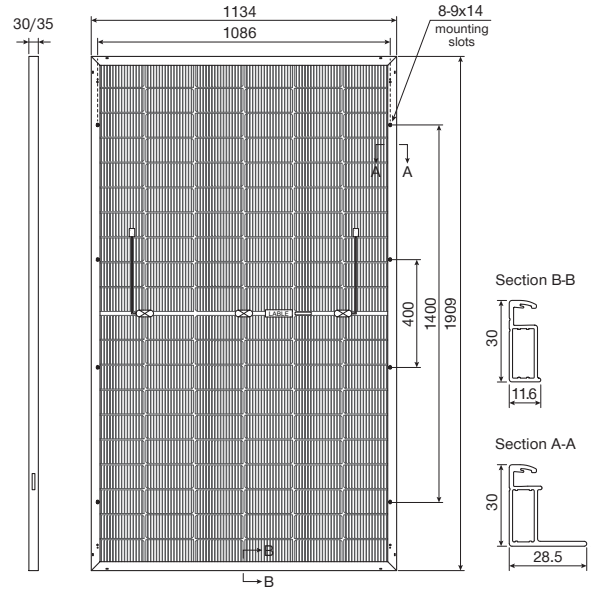


Maximum Efficiency  
**21.94%**

## Structure Performance

(Unit: mm)

|                        |   |
|------------------------|---|
| Solar Cell Type        | 182mm N-TopCon Mono Cell (Half Cell)  |
| Solar Cell Arrangement | 120pcs(6×20)  |
| Module Dimension       | 1909×1134×35mm/30mm   |
| Weight                 | 26.9kg(35mm) / 25.7kg(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 $\begin{matrix} 1400mm (+) \\ 1400mm (-) \end{matrix}$<br>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)   | 744pcs(35mm) / 864pcs(30mm)   |

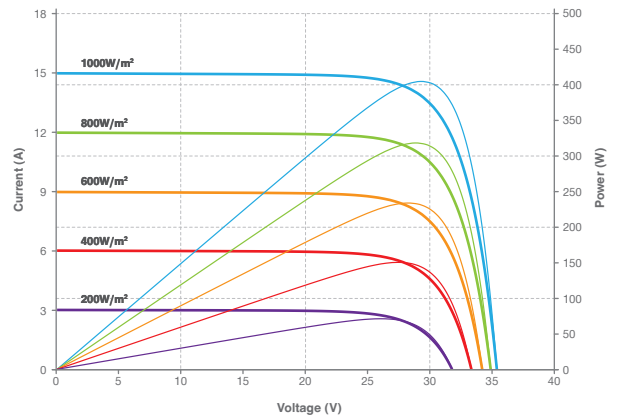


## Electrical Performance Parameters | STC

| Model Type             | 465C(BBD)<br>60(182) | 470C(BBD)<br>60(182) | 475C(BBD)<br>60(182) |       |
|------------------------|----------------------|----------------------|----------------------|-------|
| Nominal Max. Power     | P <sub>max</sub> (W) | 465                  | 470                  | 475   |
| Max. Power Voltage     | V <sub>mp</sub> (V)  | 34.63                | 34.85                | 35.06 |
| Max. Power Current     | I <sub>mp</sub> (A)  | 13.43                | 13.49                | 13.55 |
| Open Circuit Voltage   | V <sub>oc</sub> (V)  | 41.22                | 41.42                | 41.62 |
| Short Circuit Current  | I <sub>sc</sub> (A)  | 14.52                | 14.58                | 14.64 |
| Module Efficiency      | (%)                  | 21.48                | 21.71                | 21.94 |
| 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 (430C)



## Electrical Performance Parameters | NMOT

| Model Type            | 465C(BBD)<br>60(182) | 470C(BBD)<br>60(182) | 475C(BBD)<br>60(182) |       |
|-----------------------|----------------------|----------------------|----------------------|-------|
| Nominal Max. Power    | P <sub>max</sub> (W) | 349                  | 353                  | 357   |
| Max. Power Voltage    | V <sub>mp</sub> (V)  | 32.68                | 32.87                | 33.06 |
| Max. Power Current    | I <sub>mp</sub> (A)  | 10.68                | 10.74                | 10.80 |
| Open Circuit Voltage  | V <sub>oc</sub> (V)  | 38.73                | 38.92                | 39.11 |
| Short Circuit Current | I <sub>sc</sub> (A)  | 11.81                | 11.86                | 11.91 |

\* 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       |