


N-TopCon series

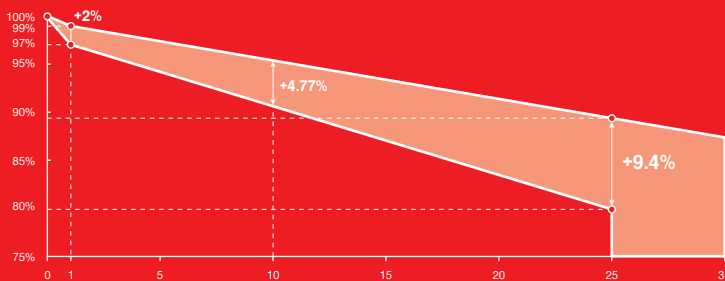
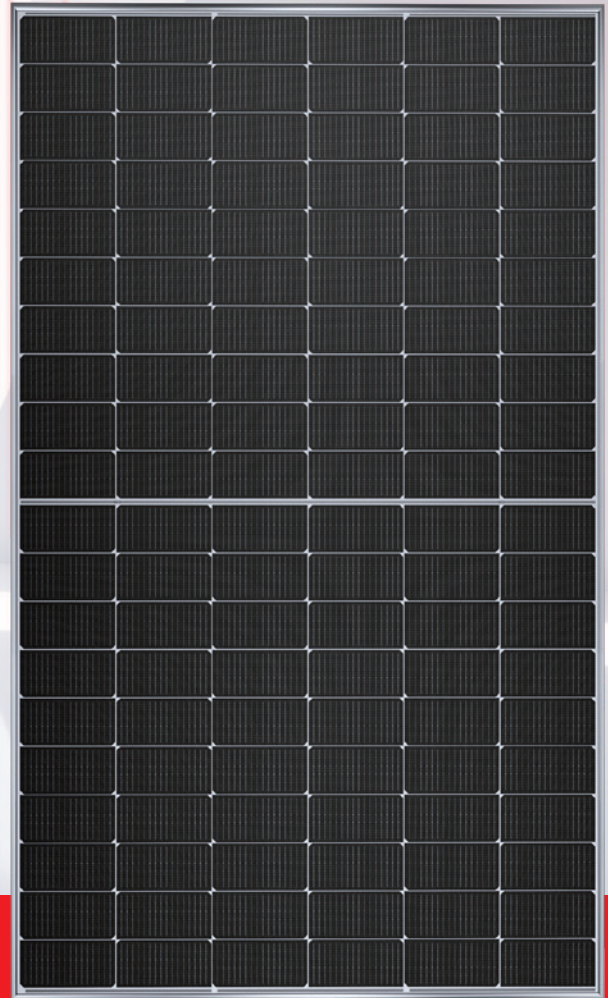
## 182 N-TopCon Bifacial Module

465W ~ 480W

 **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.
-  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 N-TopCon Bifacial Module



Power Range  
**465W ~ 480W**



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

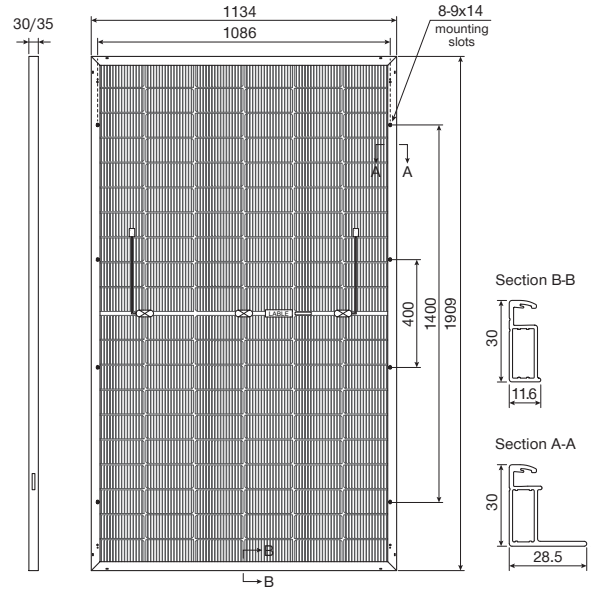


Maximum Efficiency  
**22.17%**

## Structure Performance

<b>Solar Cell Type</b>	182mm N-TopCon Mono Cell (Half Cell)
<b>Solar Cell Arrangement</b>	120pcs(6×20)
<b>Module Dimension</b>	1909×1134×35mm/30mm
<b>Weight</b>	26.9kg(35mm) / 25.7kg(30mm)
<b>Front Glass</b>	2.0mm, highly transparent tempered glass with anti-reflective coating
<b>Frame</b>	Anodized Aluminum Alloy
<b>Junction Box</b>	IP68 rated
<b>Cable</b>	4mm <sup>2</sup> , portrait $\begin{matrix} 400mm (+) \\ 200mm (-) \end{matrix}$ , landscape $\begin{matrix} 1400mm (+) \\ 1400mm (-) \end{matrix}$ Length can be customized
<b>Diode Quantity</b>	3 pcs
<b>Front side / Rear side</b>	5400pa / 2400pa
<b>Connector</b>	MC4 Compatible
<b>Per Pallet</b>	31pcs(35mm) / 36pcs(30mm)
<b>Per Container(40'HQ)</b>	744pcs(35mm) / 864pcs(30mm)

(Unit: mm)



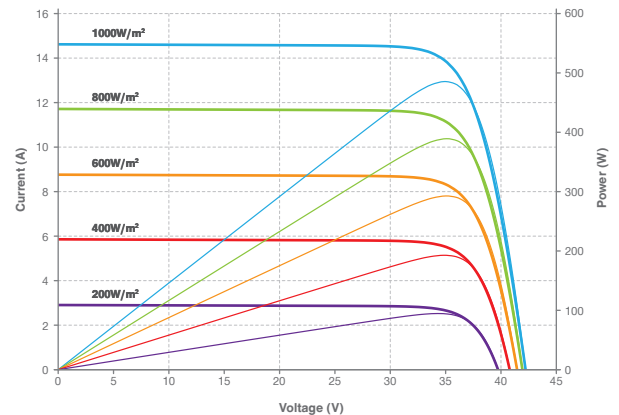
## Electrical Performance Parameters | STC

Model Type	465C(HBD) 60(182)	470C(HBD) 60(182)	475C(HBD) 60(182)	480C(HBD) 60(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	465	470	475	480
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	34.84	35.05	35.27	35.48
<b>Max. Power Current</b> I <sub>mp</sub> (A)	13.35	13.41	13.47	13.53
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	41.47	41.67	41.87	42.07
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	14.43	14.49	14.55	14.61
<b>Module Efficiency</b> (%)	21.48	21.71	21.94	22.17
<b>Power Output Tolerance</b> (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 (485C)



## Electrical Performance Parameters | NMOT

Model Type	465C(HBD) 60(182)	470C(HBD) 60(182)	475C(HBD) 60(182)	480C(HBD) 60(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	349	353	357	361
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	32.87	33.06	33.25	33.43
<b>Max. Power Current</b> I <sub>mp</sub> (A)	10.62	10.68	10.74	10.80
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	38.96	39.15	39.34	39.53
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	11.74	11.79	11.84	11.89

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

\* Power measurement tolerance ±3%.

## Temperature Characteristics

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

## Maximum Parameters

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