

N-TopCon series

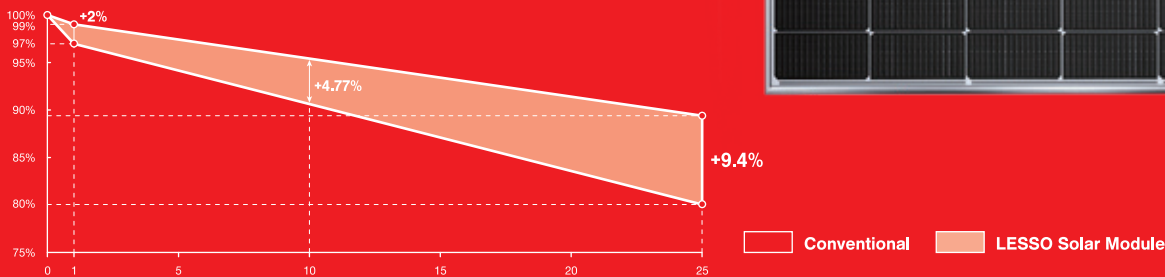
# 182 N-TopCon Monofacial Module

**465W ~ 480W**

**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.
- 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  
**465W ~ 480W**



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

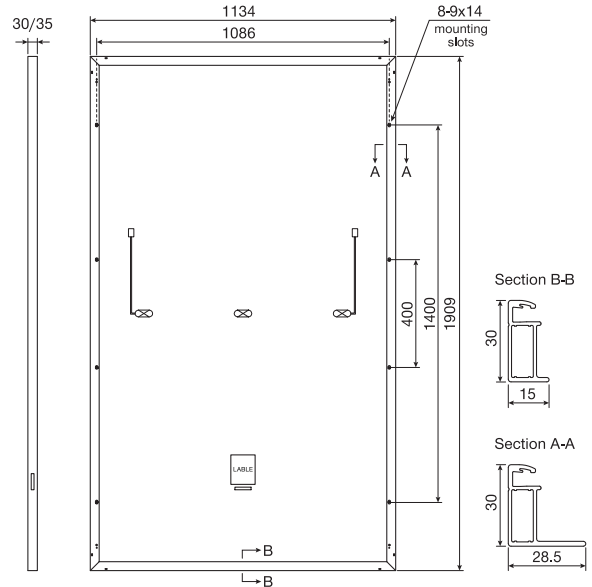


Maximum Efficiency  
**22.17%**

## Structure Performance

(Unit: mm)

<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>	23.2kg(35mm) / 22.1kg(30mm)
<b>Front Glass</b>	3.2mm, highly transparent tempered glass with anti-reflective coating
<b>Back Sheet</b>	White
<b>Frame</b>	Anodized Aluminum Alloy
<b>Junction Box</b>	IP68 rated
<b>Cable</b>	4mm <sup>2</sup> , portrait <sup>400mm(+)</sup> / <sub>200mm(-)</sub> , landscape <sup>1400mm(+)</sup> / <sub>1400mm(-)</sub> 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)



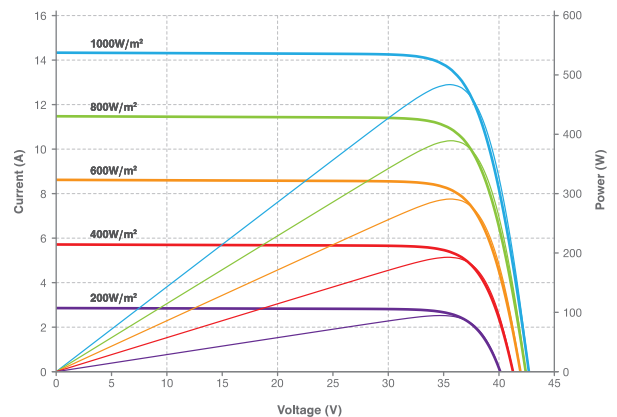
## Electrical Performance Parameters | STC

Model Type	465C(HPM) 60(182)	470C(HPM) 60(182)	475C(HPM) 60(182)	480C(HPM) 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)	35.02	35.18	35.35	35.51
<b>Max. Power Current</b> I <sub>mp</sub> (A)	13.28	13.36	13.44	13.52
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	42.18	42.34	42.50	42.67
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	14.03	14.11	14.19	14.27
<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(HPM) 60(182)	470C(HPM) 60(182)	475C(HPM) 60(182)	480C(HPM) 60(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	350	354	358	362
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	32.96	33.15	33.34	33.52
<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)	40.13	40.29	40.45	40.61
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	11.35	11.42	11.49	11.56

\* 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>	25A