



N-TopCon series

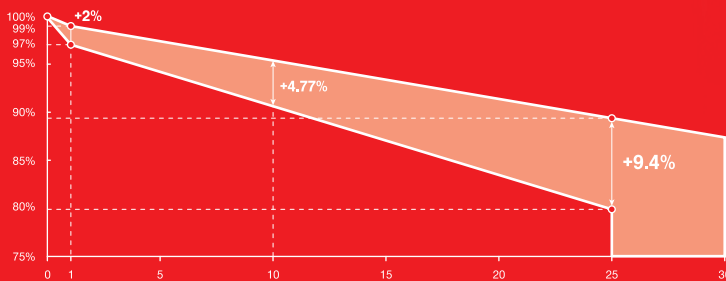
# 182 N-TopCon Monofacial Module

415W ~ 430W

 **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  
**415W ~ 430W**



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

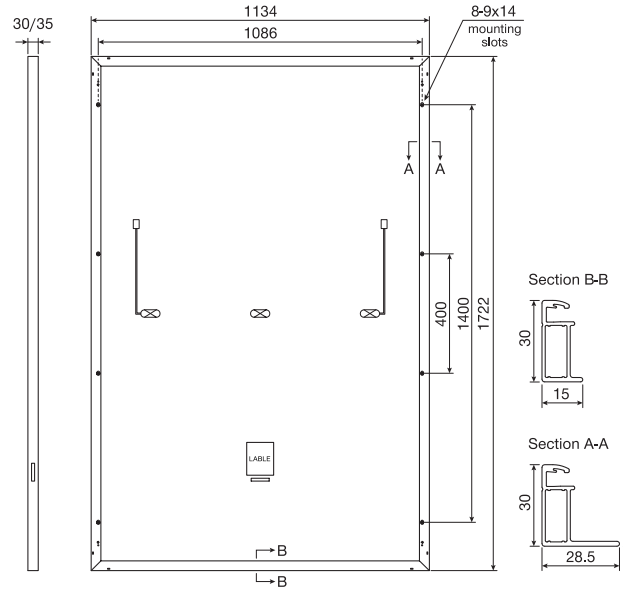


Maximum Efficiency  
**22.02%**

## Structure Performance

(Unit: mm)

<b>Solar Cell Type</b>	182mm N-TopCon Mono Cell (Half Cell)
<b>Solar Cell Arrangement</b>	108pcs(6×18)
<b>Module Dimension</b>	1722×1134×35mm/30mm
<b>Weight</b>	21.7kg(35mm) / 20.6kg(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>	806pcs(35mm) / 936pcs(30mm)



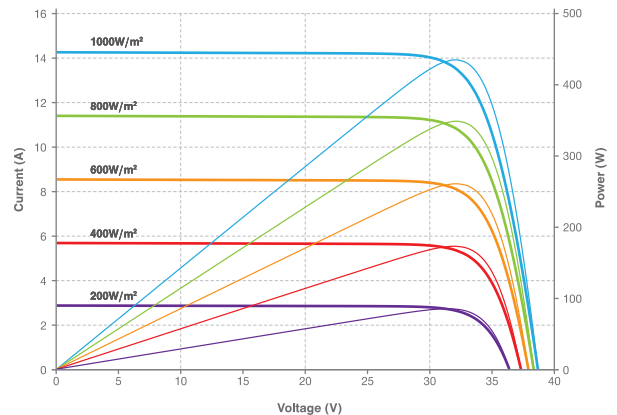
## Electrical Performance Parameters | STC

Model Type	415C(HPM) 54(182)	420C(HPM) 54(182)	425C(HPM) 54(182)	430C(HPM) 54(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	415	420	425	430
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	31.44	31.63	31.82	32.00
<b>Max. Power Current</b> I <sub>mp</sub> (A)	13.20	13.28	13.36	13.44
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	37.97	38.16	38.35	38.54
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	13.97	14.05	14.13	14.21
<b>Module Efficiency</b> (%)	21.25	21.51	21.76	22.02
<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 (435C)



## Electrical Performance Parameters | NMOT

Model Type	415C(HPM) 54(182)	420C(HPM) 54(182)	425C(HPM) 54(182)	430C(HPM) 54(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	312	316	320	323
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	29.36	29.51	29.69	29.75
<b>Max. Power Current</b> I <sub>mp</sub> (A)	10.63	10.71	10.78	10.86
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	36.07	36.25	36.43	36.61
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	11.28	11.35	11.42	11.49

\* 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

