


Pure Black **PRO** series

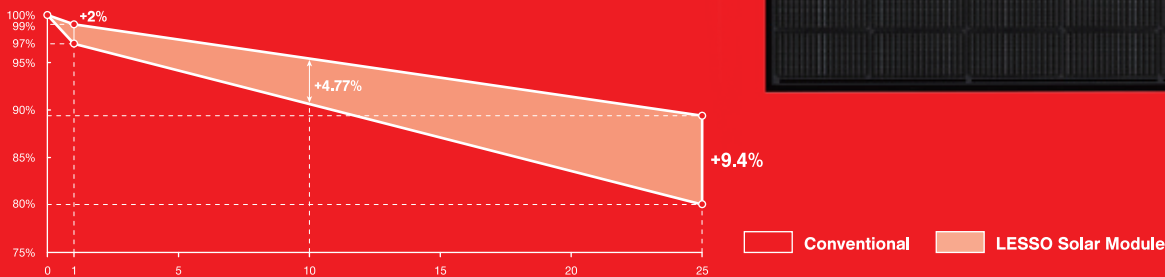
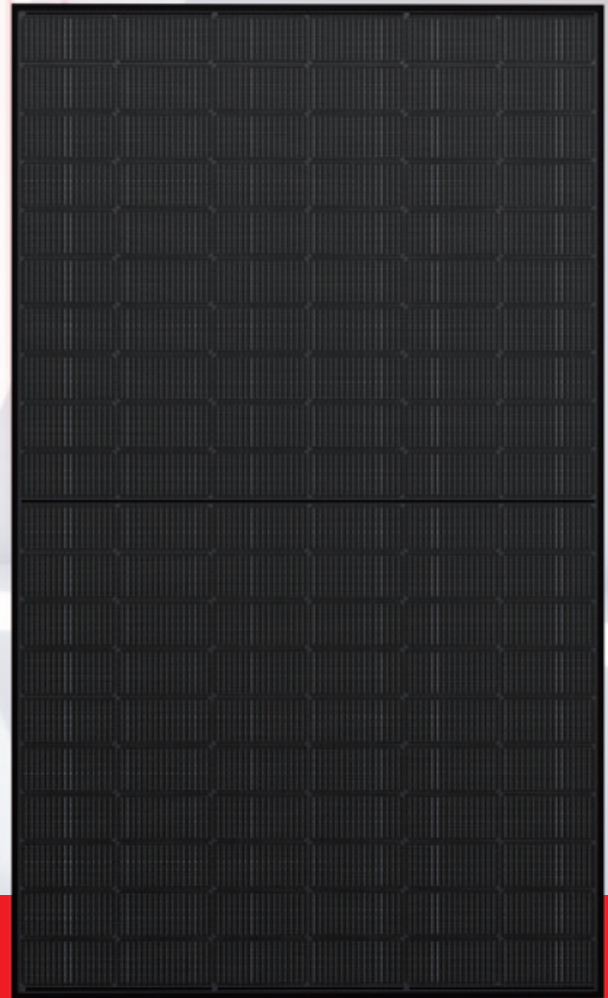
# 182 N-TopCon Monofacial Module

**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 Pure Black N-TopCon Monofacial Module



Power Range  
**465W ~ 480W**



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

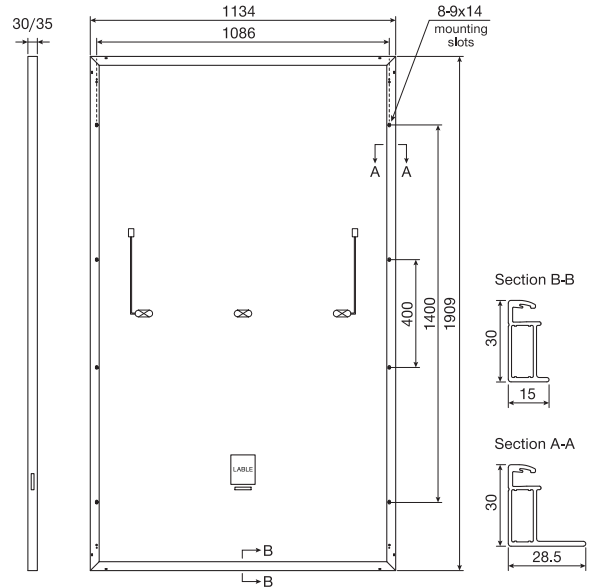


Maximum Efficiency  
**22.17%**

## 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>	Black
<b>Frame</b>	Anodized Aluminum Alloy (Black)
<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)



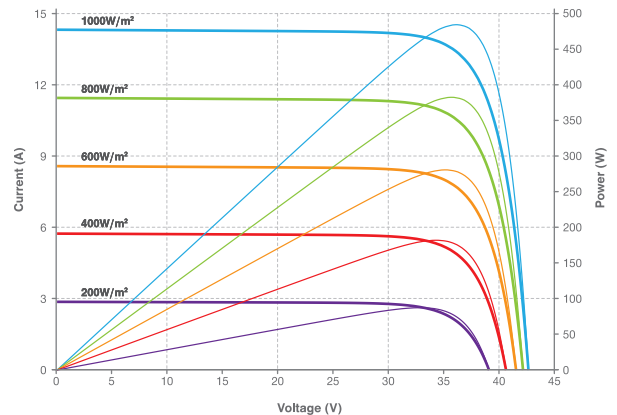
## Electrical Performance Parameters | STC

Model Type	465C(BPM) 60(182)	470C(BPM) 60(182)	475C(BPM) 60(182)	480C(BPM) 60(182)
<b>Nominal Max. Power</b> Pmax(W)	465	470	475	480
<b>Max. Power Voltage</b> Vmp(V)	34.81	34.98	35.14	35.30
<b>Max. Power Current</b> Imp(A)	13.36	13.44	13.52	13.60
<b>Open Circuit Voltage</b> Voc(V)	41.93	42.09	42.25	42.42
<b>Short Circuit Current</b> Isc(A)	14.11	14.19	14.28	14.36
<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(BPM) 60(182)	470C(BPM) 60(182)	475C(BPM) 60(182)	480C(BPM) 60(182)
<b>Nominal Max. Power</b> Pmax(W)	350	354	358	362
<b>Max. Power Voltage</b> Vmp(V)	32.78	32.97	33.15	33.34
<b>Max. Power Current</b> Imp(A)	10.68	10.74	10.80	10.86
<b>Open Circuit Voltage</b> Voc(V)	39.89	40.05	40.21	40.37
<b>Short Circuit Current</b> Isc(A)	11.42	11.49	11.56	11.63

\* 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 (Isc)</b>	+0.043%
<b>Temperature Coefficient (Voc)</b>	-0.25%
<b>Temperature Coefficient (Pmax)</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