


Pure Black **PRO** series

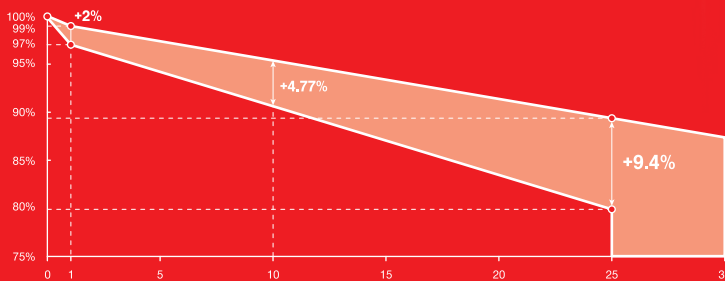
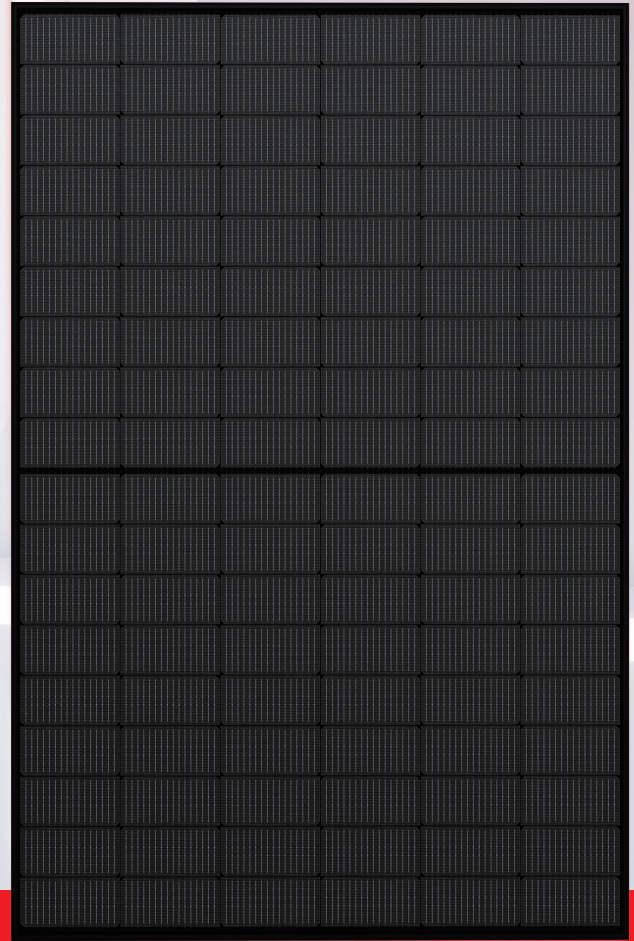
# 182 N-TOPCon Monofacial Module

**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 Pure Black N-TOPCon Monofacial Module



Power Range  
**415W ~ 430W**



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

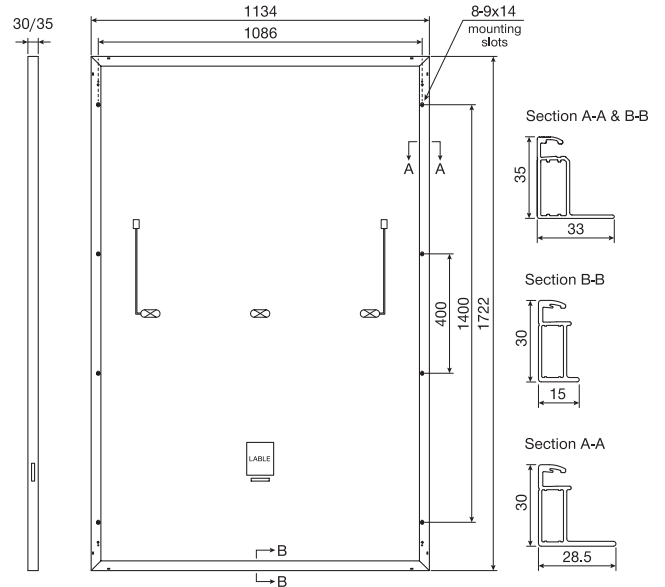


Maximum Efficiency  
**22.02%**

## Structure Performance

Solar Cell Type	182mm N-TOPCon Mono Cell (Half Cell)
Solar Cell Arrangement	108pcs(6×18)
Module Dimension	1722×1134×35mm/30mm
Weight	21.7kg(35mm) / 20.6kg(30mm)
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	Black
Frame	Anodized Aluminum Alloy (Black)
Junction Box	IP68 rated
Cable	4mm <sup>2</sup> , portrait <sup>400mm(+)</sup> / <sub>200mm(-)</sub> , landscape <sup>1400mm(+)</sup> / <sub>1400mm(-)</sub> 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)	806pcs(35mm) / 936pcs(30mm)

(Unit: mm)



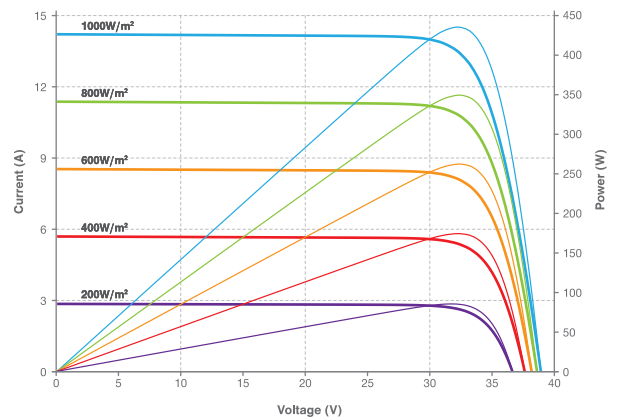
## Electrical Performance Parameters | STC

Model Type	415C(BPM) 54(182)	420C(BPM) 54(182)	425C(BPM) 54(182)	430C(BPM) 54(182)	
Nominal Max. Power	P <sub>max</sub> (W)	415	420	425	430
Max. Power Voltage	V <sub>mp</sub> (V)	31.64	31.82	32.01	32.20
Max. Power Current	I <sub>mp</sub> (A)	13.12	13.20	13.28	13.36
Open Circuit Voltage	V <sub>oc</sub> (V)	38.20	38.39	38.58	38.77
Short Circuit Current	I <sub>sc</sub> (A)	13.89	13.97	14.05	14.13
Module Efficiency	(%)	21.25	21.51	21.76	22.02
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 (435C)



## Electrical Performance Parameters | NMOT

Model Type	415C(BPM) 54(182)	420C(BPM) 54(182)	425C(BPM) 54(182)	430C(BPM) 54(182)	
Nominal Max. Power	P <sub>max</sub> (W)	312	316	320	323
Max. Power Voltage	V <sub>mp</sub> (V)	29.52	29.68	29.86	29.91
Max. Power Current	I <sub>mp</sub> (A)	10.57	10.65	10.72	10.80
Open Circuit Voltage	V <sub>oc</sub> (V)	36.29	36.47	36.68	36.79
Short Circuit Current	I <sub>sc</sub> (A)	11.21	11.28	11.35	11.42

\* 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	25A

