


Pure Black PRO series

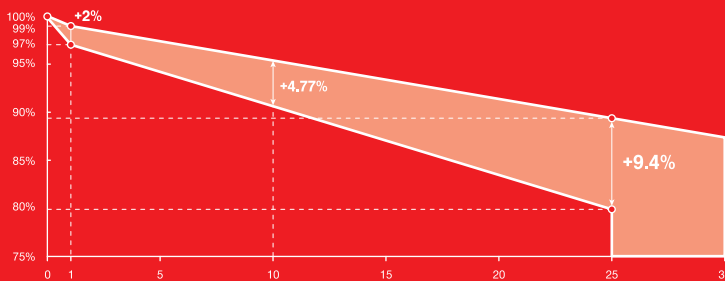
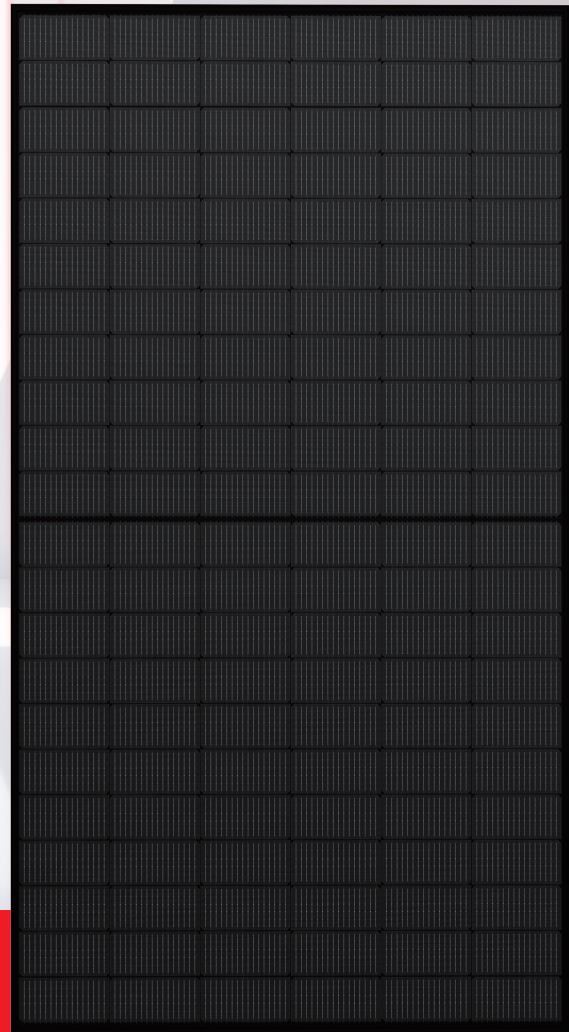
## 182 N-TOPCon Bifacial Module

515W ~ 525W

 **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 Pure Black N-TOPCon Bifacial Module



Power Range  
**515W ~ 525W**



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

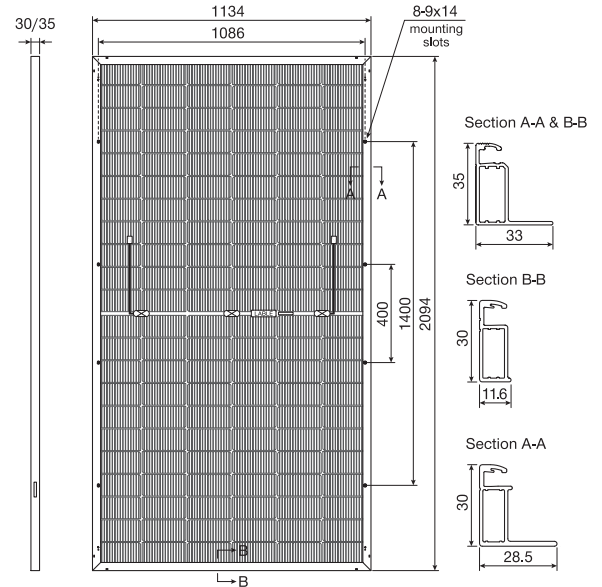


Maximum Efficiency  
**22.11%**

## Structure Performance

<b>Solar Cell Type</b>	182mm N-TOPCon Mono Cell (Half Cell)
<b>Solar Cell Arrangement</b>	132pcs(6x22)
<b>Module Dimension</b>	2094×1134×35mm/30mm
<b>Weight</b>	29.6kg(35mm) / 28.4kg(30mm)
<b>Front Glass</b>	2.0mm, highly transparent tempered glass with anti-reflective coating
<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>	682pcs(35mm) / 792pcs(30mm)

(Unit: mm)



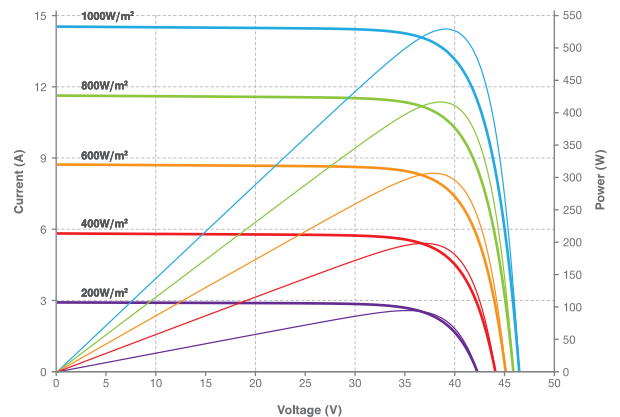
## Electrical Performance Parameters | STC

Model Type	515C(BBD) 66(182)	520C(BBD) 66(182)	525C(BBD) 66(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	515	520	525
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	38.26	38.46	38.66
<b>Max. Power Current</b> I <sub>mp</sub> (A)	13.47	13.53	13.59
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	45.89	46.09	46.29
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	14.40	14.46	14.52
<b>Module Efficiency</b> (%)	21.69	21.90	22.11
<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 (530C)



## Electrical Performance Parameters | NMOT

Model Type	515C(BBD) 66(182)	520C(BBD) 66(182)	525C(BBD) 66(182)
<b>Nominal Max. Power</b> P <sub>max</sub> (W)	386	390	394
<b>Max. Power Voltage</b> V <sub>mp</sub> (V)	36.01	36.18	36.35
<b>Max. Power Current</b> I <sub>mp</sub> (A)	10.72	10.78	10.84
<b>Open Circuit Voltage</b> V <sub>oc</sub> (V)	43.36	43.55	43.74
<b>Short Circuit Current</b> I <sub>sc</sub> (A)	11.65	11.70	11.75

\* 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

