

N-TOPCon series

182 N-TOPCon Bifacial Module

430W ~ 440W



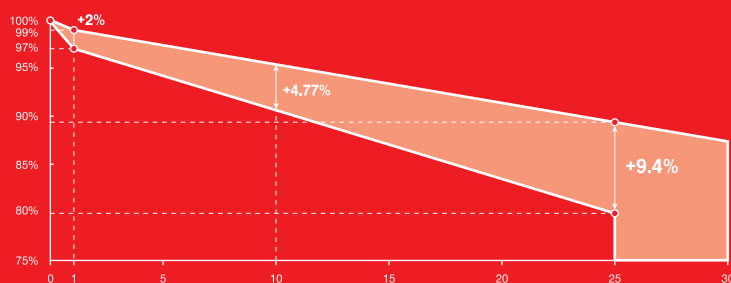
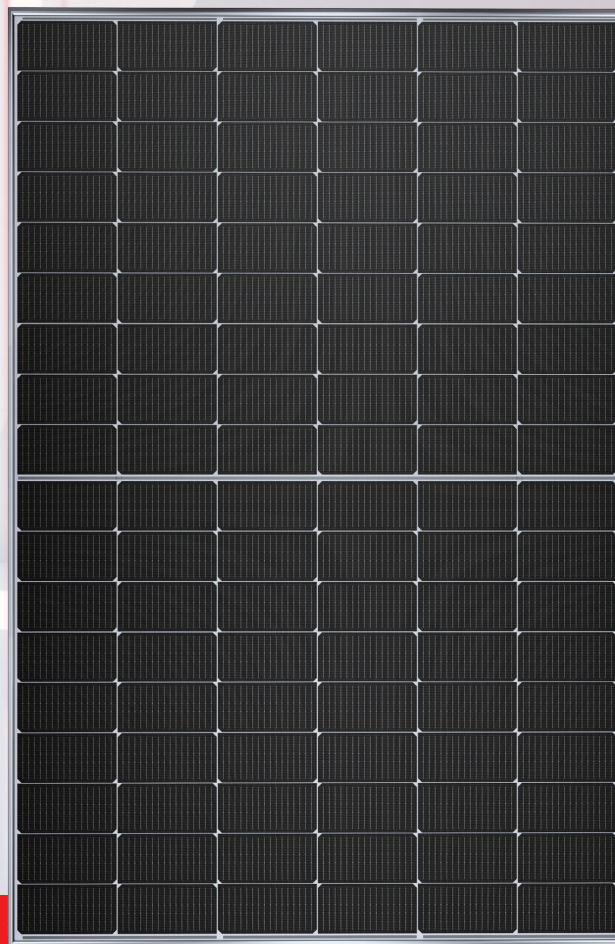
12 years product
workmanship warranty



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.



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 N-TOPCon Bifacial Module



Power Range
430W ~ 440W



Power Output Tolerance
0W ~ +5W



Maximum Efficiency
22.53%

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	24.2kg(35mm) / 23.1kg(30mm)
Front Glass	2.0mm, highly transparent semi tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm ² , portrait 400mm (+) 200mm (-), landscape 1400mm (+) 1400mm (-) Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	PV-01 (Guangdong Lesso Electric Co., Ltd.)
Per Pallet	31pcs(35mm) / 36pcs(30mm)
Per Container(40'HQ)	806pcs(35mm) / 936pcs(30mm)
Fire Rating	Class A

Electrical Performance Parameters | STC

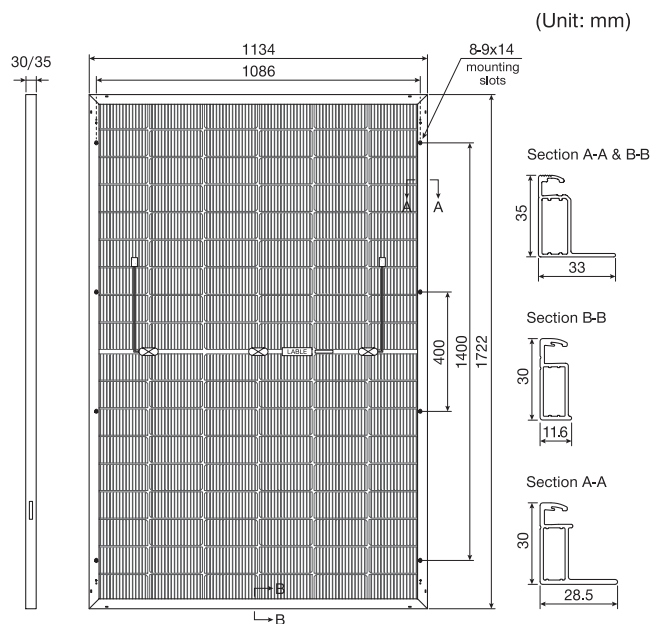
Model Type		430C(HBD) 54(182)	435C(HBD) 54(182)	440C(HBD) 54(182)
Nominal Max. Power	P _{max} (W)	430	435	440
Max. Power Voltage	V _{MP} (V)	31.88	32.11	32.34
Max. Power Current	I _{MP} (A)	13.49	13.55	13.61
Open Circuit Voltage	V _{OC} (V)	37.37	37.57	37.77
Short Circuit Current	I _{SC} (A)	14.73	14.79	14.85
Module Efficiency	(%)	22.02	22.28	22.53
Power Output Tolerance	(W)	0~+5W		

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
* Power measurement tolerance ±3%.

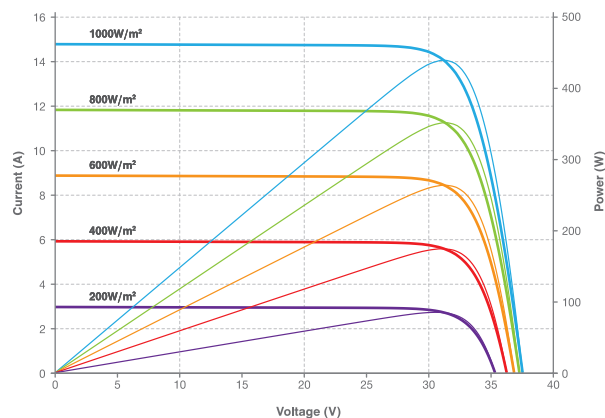
Bifacial Nameplate Irradiance | BNPI

Model Type		430C(HBD) 54(182)	435C(HBD) 54(182)	440C(HBD) 54(182)
Nominal Max. Power	P _{max} (W)	474	479	485
Max. Power Voltage	V _{MP} (V)	31.94	32.17	32.40
Max. Power Current	I _{MP} (A)	14.85	14.92	14.98
Open Circuit Voltage	V _{OC} (V)	37.36	37.56	37.76
Short Circuit Current	I _{SC} (A)	16.26	16.33	16.39
BIFI		0.326	0.326	0.333

* BIFI: rear irradiance driven power gain yield.
* BNPI: Irradiance Front side 100W/m² Rear side 135W/m², Ambient Temperature 25°C, Air Mass AM1.5.
* Power measurement tolerance ±3%.



Current-Voltage & Power-Voltage Curve (435C)



Bifaciality Coefficient

Tolerance/ϕIsc	77.71±4%
Tolerance/ϕVoc	99.00±3%
Tolerance/ϕPmax	77.32±5%

Short Circuit Current at BSI

Tolerance/Isc [Adc]	17.62±4%
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Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient (Isc)	+0.043%
Temperature Coefficient (Voc)	-0.25%
Temperature Coefficient (Pmax)	-0.30%

Maximum Parameters

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	30A

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Data contained in these specifications is subject to change without notice.