

Pure Black **PRO** series

182 N-TopCon Bifacial Single Glass Module

410W ~ 430W



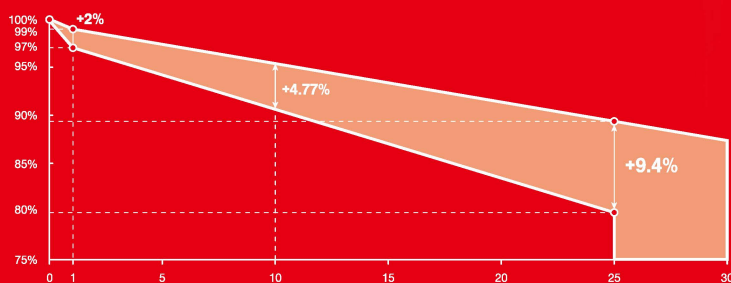
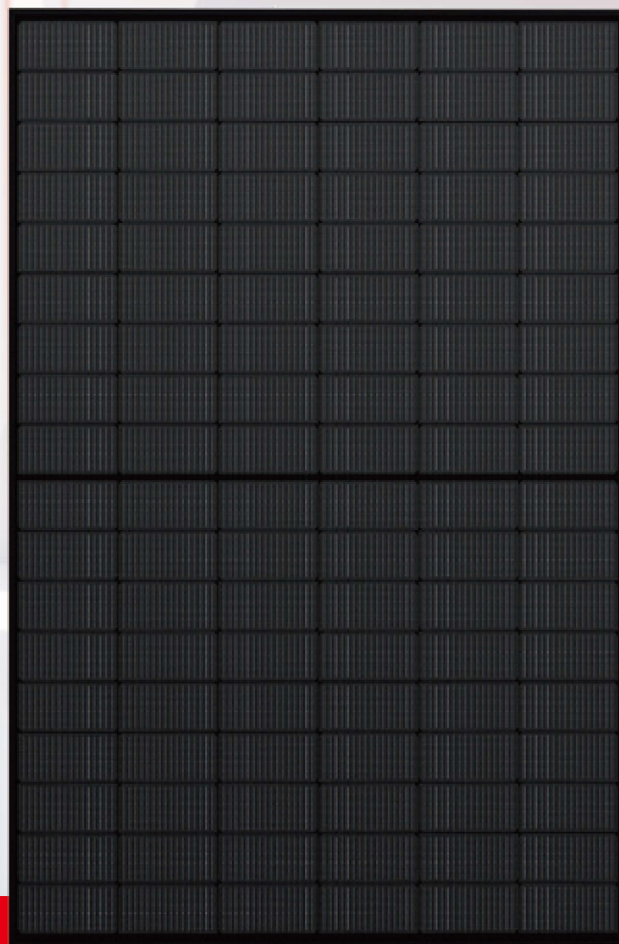
12 years product
workmanship warranty



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.



N-TopCon solar cell has no LID naturally which can increase power generation.



Higher bifaciality, higher power output and lower BOS cost.



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 Single Glass Module



Power Range
410W ~ 430W



Power Output Tolerance
0W ~ +5W

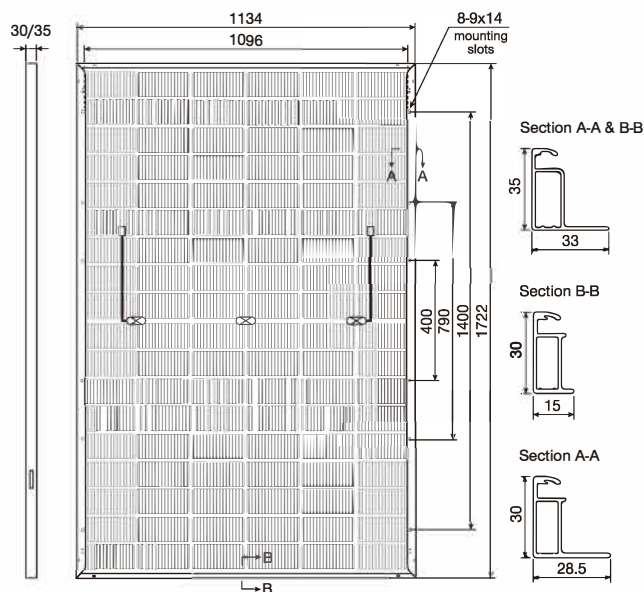


Maximum Efficiency
22.02%

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	Transparent Black Grid
Frame	Anodized Aluminum Alloy (Black)
Junction Box	IP68 rated
Cable	4mm ² , portrait $\frac{400mm(+)}{200mm(-)}$, landscape $\frac{1400mm(+)}{1400mm(-)}$ 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)



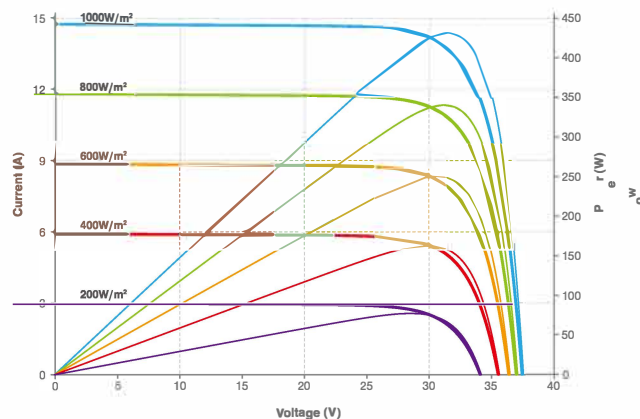
Electrical Performance Parameters | STC

Model Type		410C(HBB) 54(182)	415C(HBB) 54(182)	420C(HBB) 54(182)	425C(HBB) 54(182)	430C(HBB) 54(182)
Nominal Max. Power	Pmax(W)	410	415	420	425	430
Max. Power Voltage	Vmp(V)	30.94	31.18	31.42	31.65	31.88
Max. Power Current	Imp(A)	13.25	13.31	13.37	13.43	13.49
Open Circuit Voltage	Voc(V)	36.57	36.77	36.97	37.17	37.37
Short Circuit Current	Isc(A)	14.49	14.55	14.61	14.67	14.73
Module Efficiency	(%)	21.00	21.23	21.51	21.76	22.02
Power Output Tolerance	(W)	0~+5W				

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

* Power measurement tolerance ±3%.

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



Electrical Performance Parameters | NMOT

Model Type		410C(HBB) 54(182)	415C(HBB) 54(182)	420C(HBB) 54(182)	425C(HBB) 54(182)	430C(HBB) 54(182)
Nominal Max. Power	Pmax(W)	307	311	315	319	323
Max. Power Voltage	Vmp(V)	29.20	29.41	29.61	29.82	30.02
Max. Power Current	Imp(A)	10.52	10.58	10.64	10.70	10.76
Open Circuit Voltage	Voc(V)	34.11	34.30	34.49	34.68	34.87
Short Circuit Current	Isc(A)	11.75	11.80	11.85	11.90	11.95

* NMOT: Irradiance 800W/m², Cell Temperature 20°C, Wind Speed 1m/s.

* Power measurement tolerance ±3%.

Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient (I _{sc})	+0.043%
Temperature Coefficient (V _{oc})	-0.25%
Temperature Coefficient (P _{max})	-0.30%

Maximum Parameters

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