



# LESSO


## 182 N-TopCon Mono Half-cell Module

**460W ~ 485W**



 **12** years product workmanship warranty

 **30** years linear power output warranty

 1st year power degradation no more than **1%**  
Subsequent annual power degradation no more than **0.40%**



# LESSO 182 N-TopCon Mono Half-cell Module



Power Range  
**460W ~ 485W**



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



Maximum Efficiency  
**22.4%**

## Features and Benefits



### 10-30% Additional Power Generation

30 years lifespan brings 10-30% additional power generation comparing with conventional P-type module.



### Better Weak Illumination Response

Higher power output even under low-light environments like on cloudy or foggy days.



### ZERO LID (Light Induced Degradation)

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



### Better Temperature Coefficient

Higher power generation under working conditions, thanks to passivating contact cell technology.



### Lower LCOE

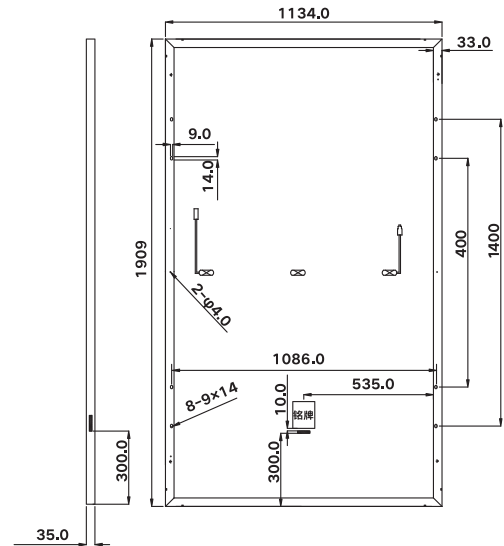
Higher bifaciality, higher power output and lower BOS cost.



### Wider Applicability

More application scenes like BIPV, vertical installation, snowfield, high-humid, windy and dusty area.

(Unit: mm)



## Electrical Performance Parameters | STC

Model Type		460C(HPM) 60(182)	465C(HPM) 60(182)	470C(HPM) 60(182)	475C(HPM) 60(182)	480C(HPM) 60(182)	485C(HPM) 60(182)
Nominal Max. Power	P <sub>max</sub> (W)	460	465	470	475	480	485
Maximum Power Voltage	V <sub>mp</sub> (V)	34.86	35.02	35.18	35.35	35.51	35.67
Maximum Power Current	I <sub>mp</sub> (A)	13.20	13.28	13.36	13.44	13.52	13.60
Open Circuit Voltage	V <sub>oc</sub> (V)	42.01	42.18	42.34	42.50	42.67	42.73
Short Circuit Current	I <sub>sc</sub> (A)	13.95	14.03	14.11	14.19	14.27	14.35
Module Efficiency	(%)	21.25	21.48	21.71	21.94	22.17	22.40
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%.

## Electrical Performance Parameters | NMOT

Model Type		460C(HPM) 60(182)	465C(HPM) 60(182)	470C(HPM) 60(182)	475C(HPM) 60(182)	480C(HPM) 60(182)	485C(HPM) 60(182)
Nominal Max. Power	P <sub>max</sub> (W)	346	350	354	358	362	366
Maximum Power Voltage	V <sub>mp</sub> (V)	32.77	32.96	33.15	33.34	33.52	33.71
Maximum Power Current	I <sub>mp</sub> (A)	10.56	10.62	10.68	10.74	10.80	10.86
Open Circuit Voltage	V <sub>oc</sub> (V)	39.97	40.13	40.29	40.45	40.61	40.77
Short Circuit Current	I <sub>sc</sub> (A)	11.28	11.35	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%.

## Structure Performance

Solar Cell Type	182mm N-TopCon Mono Cell
Solar Cell Arrangement	120pcs(6×20)
Module Dimension	1909×1134×35mm
Weight	23.2kg
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	White
Frame	Anodized Aluminum Alloy
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
Per Container(40'HQ)	744pcs

## 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

