



# LESSO


## 182 N-Type Mono Bifacial Half-cell Module

**550W ~ 580W**



 **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-type Mono Bifacial Half-cell Module



Power Range  
**550W ~ 580W**



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



Maximum Efficiency  
**22.45%**

## 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

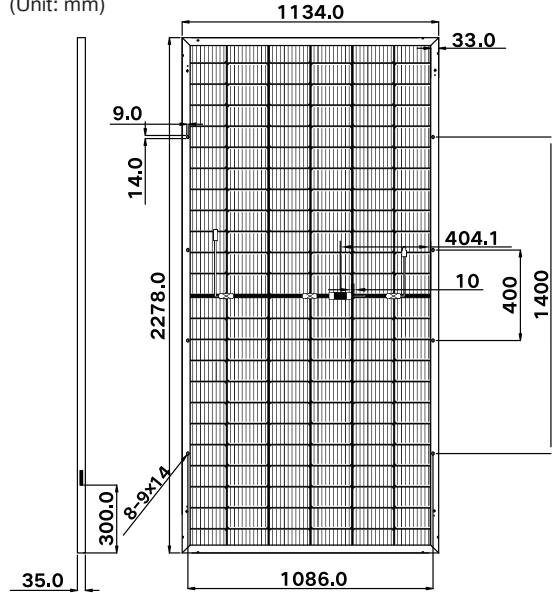
Higher bifaciality, higher power output and lower BOS cost.



### Wider Applicability

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

(Unit: mm)



## Electrical Performance Parameters | STC

Peak Power	P <sub>max</sub> (W)	550	555	560	565	570	575	580
MPP Voltage	V <sub>mp</sub> (V)	41.73	41.92	42.11	42.30	42.45	42.60	42.75
MPP Current	I <sub>mp</sub> (A)	13.18	13.24	13.30	13.36	13.43	13.50	13.57
Open Circuit Voltage	V <sub>oc</sub> (V)	50.23	50.43	50.63	50.83	51.03	51.23	51.43
Short Circuit Current	I <sub>sc</sub> (A)	13.97	14.03	14.09	14.15	14.21	14.27	14.33
Module Efficiency	(%)	21.29	21.48	21.68	21.87	22.07	22.26	22.45
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

Peak Power	P <sub>max</sub> (W)	413	417	421	425	429	433	437
MPP Voltage	V <sub>mp</sub> (V)	39.26	39.42	39.57	39.72	39.87	40.02	40.13
MPP Current	I <sub>mp</sub> (A)	10.52	10.58	10.64	10.70	10.76	10.82	10.89
Open Circuit Voltage	V <sub>oc</sub> (V)	47.71	47.90	48.09	48.28	48.47	48.66	48.85
Short Circuit Current	I <sub>sc</sub> (A)	11.27	11.32	11.37	11.42	11.46	11.51	11.56

\* 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-Type Mono Cell
Solar Cell Arrangement	144pcs(6×24)
Module Dimension	2278×1134×35mm
Weight	32.5kg
Front Glass	2.0mm, highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm <sup>2</sup> PV cable, 300mm or customized length
Diode Quantity	3 pcs
Front side/Rear side	5400pa/2400pa
Connector	MC4 Compatible
Per Pallet	31pcs
Per Container(40' HQ)	620pcs

## Temperature Characteristics

Nominal Module Operating Temperature	42±2°C
Temperature Coefficient (I <sub>sc</sub> )	+0.045%/°C
Temperature Coefficient (V <sub>oc</sub> )	-0.250%/°C
Temperature Coefficient (P <sub>max</sub> )	-0.300%/°C

## Maximum Parameters

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

Lesso New Energy Development Private Limited

One Raffles Quay, North Tower, #19-03, Singapore 048583

CHINA LESSO, STOCK CODE: 2128.HK

LESSO Solar

info@lessosolar.com www.lesso.com/solar