



LESSO


182 N-Type Mono Half-cell Module

460W ~ 480W



 **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%**

* Available for pre-order. Stocks will be ready by June 2023.



LESSO 182 N-type Mono Half-cell Module



Power Range
460W ~ 480W



Power Output Tolerance
0W ~ +5W



Maximum Efficiency
22.17%

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

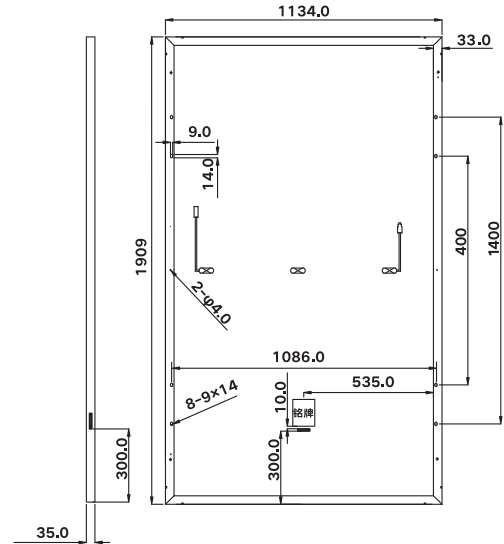
Higher bifaciality, higher power output and lower BOS cost.



Wider Applicability

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

(Unit: mm)



Electrical Performance Parameters | STC

Model Type	460D(HPM) 60(182)	465D(HPM) 60(182)	470D(HPM) 60(182)	475D(HPM) 60(182)	480D(HPM) 60(182)
Nominal Max. Power P _{max} (W)	460	465	470	475	480
Maximum Power Voltage V _{mp} (V)	34.86	35.02	35.18	35.35	35.51
Maximum Power Current I _{mp} (A)	13.20	13.28	13.36	13.44	13.52
Open Circuit Voltage V _{oc} (V)	42.01	42.18	42.34	42.50	42.67
Short Circuit Current I _{sc} (A)	13.95	14.03	14.11	14.19	14.27
Module Efficiency (%)	21.25	21.48	21.71	21.94	22.17
Power Output Tolerance (W)	0~+5W				

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

* Power measurement tolerance ±3%.

Electrical Performance Parameters | NMOT

Model Type	460D(HPM) 60(182)	465D(HPM) 60(182)	470D(HPM) 60(182)	475D(HPM) 60(182)	480D(HPM) 60(182)
Nominal Max. Power P _{max} (W)	346	350	354	358	362
Maximum Power Voltage V _{mp} (V)	32.77	32.96	33.15	33.34	33.52
Maximum Power Current I _{mp} (A)	10.56	10.62	10.68	10.74	10.80
Open Circuit Voltage V _{oc} (V)	39.97	40.13	40.29	40.45	40.61
Short Circuit Current I _{sc} (A)	11.28	11.35	11.42	11.49	11.56

* NMOT: Irradiance 800W/m², 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	120pcs(6×20)
Module Dimension	1909×1134×35mm
Weight	23.2kg
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm ² 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)	744pcs

Temperature Characteristics

Nominal Module Operating Temperature	41±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	25A

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