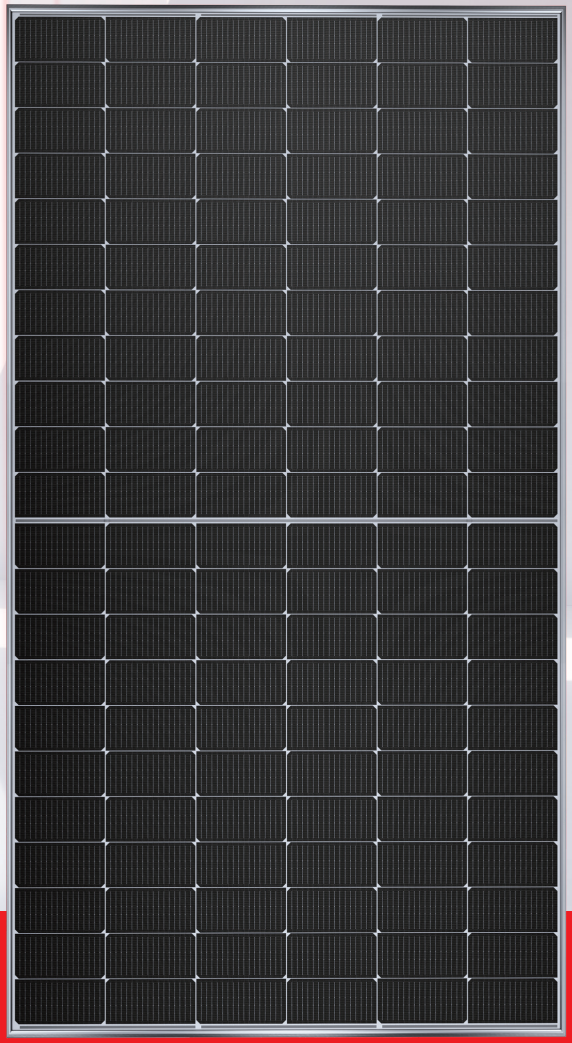
LESSO® America

LESSO GROUP
STOCK CODE: 2128.HK

N series

182 N-type Bifacial Single Glass Module

510W ~ 535W

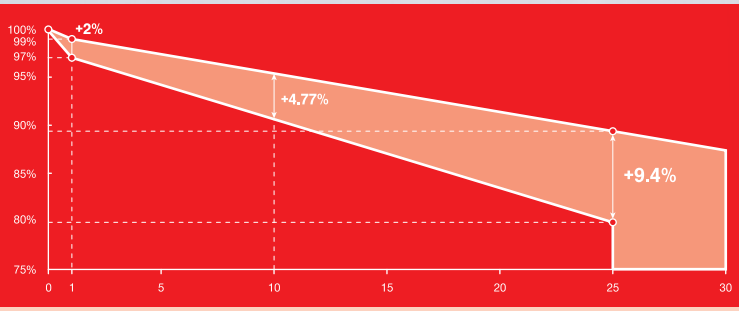


12 years product workmanship warranty

30 years linear power output warranty

1% 1st-year degradation

0.40% annual degradation



Conventional LESSO Solar Module

FEATURES AND BENEFITS

- Topcon technology, higher power generation.
- Better temperature coefficient, more power generation.
- High density packaging, improving energy density.
- Higher power output, lower bos cost.
- Even cloudy or foggy days, better weak illumination response.
- Multiple weather, resistance tests, wider applicability.
- Zero LID, increase power generation.
- Double-sided generation, powerfully energy boost.

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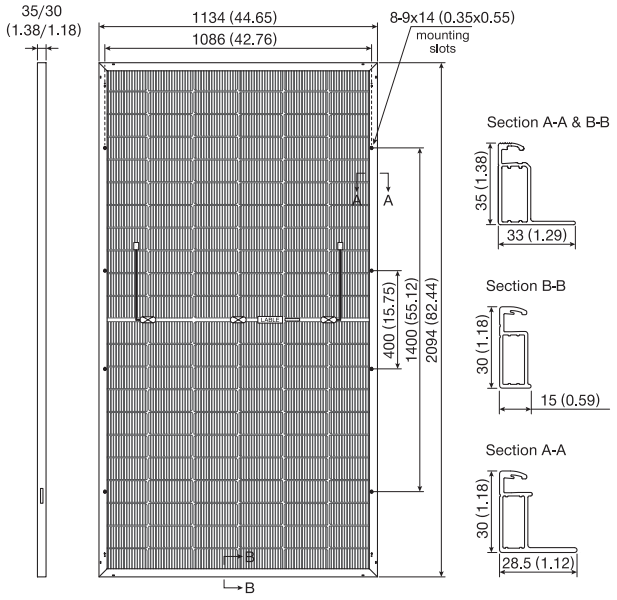
LESSO 182 N-type Bifacial Single Glass Module (66)

Power Range	Power Output Tolerance	Maximum Efficiency
510W ~ 535W	0W ~ +5W	22.53%

Structure Performance

Solar Cell Type	182mm N-TOPCon Mono Cell (Half Cell)
Solar Cell Arrangement	132pcs(6×22)
Module Dimension	2094×1134×35/30mm (82.44×44.65×1.38/1.18inches)
Weight	25.1kg (55.34lbs) (35mm (1.38 inches)) 23.8kg (52.47lbs) (30mm (1.18 inches))
Front Glass	3.2mm (0.13inches), highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm² (IEC), 12 AWG(UL) portrait 450mm (17.72in.) (+) / 250mm (9.84in.) (−) , landscape 1200mm (47.24in.) (+) / 1200mm (47.24in.) (−) or customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	MC4 Compatible
Per Pallet	31pcs (35mm (1.38 inches)) / 36pcs (30mm (1.18 inches))
Per Container(40'HQ)	682pcs (35mm (1.38 inches)) / 792pcs (30mm (1.18 inches))

Unit: mm (inch)

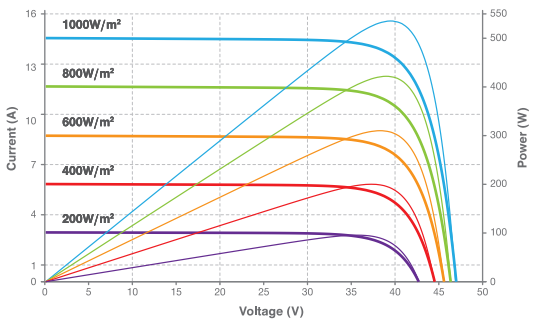


Electrical Performance Parameters

Model Type		510C(HWB)66(182)		515C(HWB)66(182)		520C(HWB)66(182)		525C(HWB)66(182)		530C(HWB)66(182)		535C(HWB)66(182)	
Testing Condition		STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Nominal Max. Power	P_{MAX} (W)	510	562	515	568	520	573	525	579	530	584	535	590
Max. Power Voltage	V_{MP} (V)	38.29	38.37	38.50	38.58	38.70	38.78	38.89	38.97	39.09	39.17	39.29	39.37
Max. Power Current	I_{MP} (A)	13.32	14.67	13.38	14.73	13.44	14.80	13.50	14.86	13.56	14.93	13.62	15.00
Open Circuit Voltage	V_{OC} (V)	47.32	47.31	47.50	47.49	47.69	47.68	47.87	47.86	48.05	48.04	48.24	48.23
Short Circuit Current	I_{SC} (A)	14.25	15.73	14.31	15.80	14.37	15.86	14.43	15.93	14.49	16.00	14.55	16.06
Module Efficiency	(%)	21.48		21.69		21.90		22.11		22.32		22.53	

* STC: Irradiance 1000W/m² (0.65W/sq.in), Cell Temperature 25°C (77°F), Air Mass AM1.5; BNPI: Irradiance 1000W/m² (0.65W/sq.in) + φ*135W/m² (0.09W/sq.in); Power measurement tolerance ±3%.

Current-Voltage & Power-Voltage Curve (535C)



Bifacial Output-rearside Power Gain

5%	Maximum Power	P_{MAX} (W)	536	541	546	551	557	562
	Module Efficiency	(%)	22.55%	22.77%	22.99%	23.21%	23.44%	23.66%
10%	Maximum Power	P_{MAX} (W)	561	567	572	578	583	589
	Module Efficiency	(%)	23.63%	23.86%	24.09%	24.32%	24.55%	24.78%
25%	Maximum Power	P_{MAX} (W)	638	644	650	656	663	669
	Module Efficiency	(%)	26.85%	27.11%	27.37%	27.64%	27.90%	28.16%

Temperature Characteristics

Nominal Module Operating Temperature	44±2℃ (111.2±35.6℉)	Temperature Coefficient (V_{OC})	-0.25%
Temperature Coefficient (I_{SC})	+0.043%	Temperature Coefficient (P_{MAX})	-0.30%

Maximum Parameters

Working Temperature	-40~+85℃ (-40~+185℉)
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	30A

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