

Pure Black series

182 N-type Bifacial Single Glass Module 415W ~ 435W



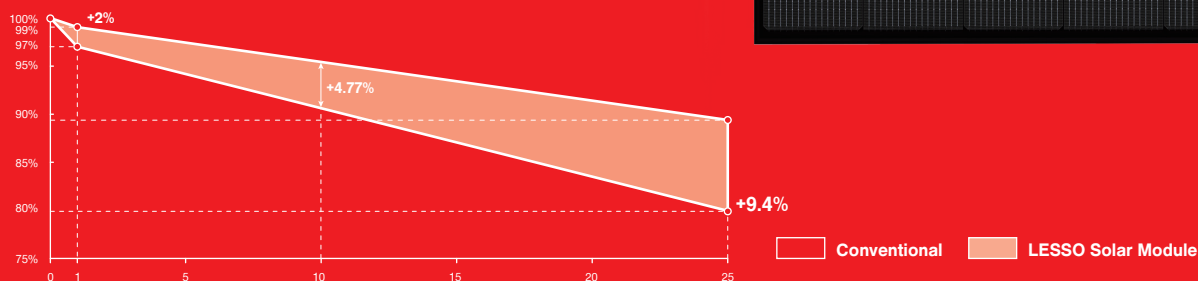
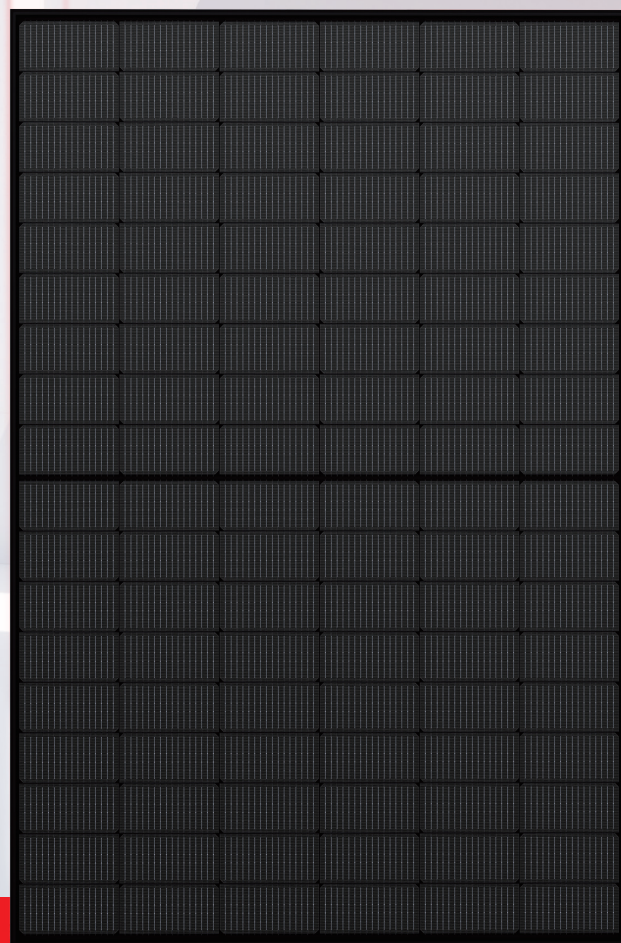
12 years product
workmanship warranty



30 years linear power output
warranty



1% 1st-year degradation
0.40% annual degradation



FEATURES AND BENEFITS



Topcon technology, higher power generation.



Highly-resistant black, crystal material, modernity to buildings.



Even cloudy or foggy days, better weak illumination response.



Zero LID, increase power generation.



High density packaging, improving energy density.



Higher power output, lower bos cost.



Multiple weather, resistance tests, wider applicability.



Double-sided generation, powerfully energy boost.

LESSO 182 Pure Black N-type Bifacial Single Glass Module (54)



Power Range
415W ~ 435W



Power Output Tolerance
0W ~ +5W

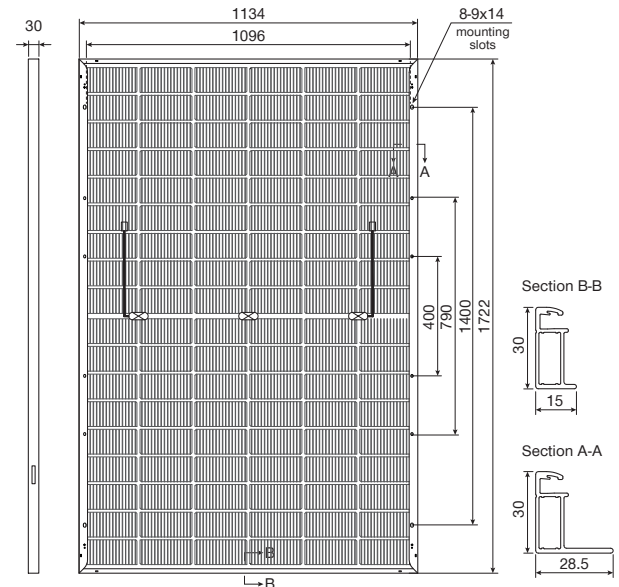


Maximum Efficiency
22.28%

(Unit: mm)

Structure Performance

Solar Cell Type	182mm N-TOPCon Mono Cell (Half Cell)
Solar Cell Arrangement	108pcs(6×18)
Module Dimension	1722×1134×30mm
Weight	20.7kg
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy (Black)
Junction Box	IP68 rated
Cable	4mm ² , portrait ^{400mm (+)} / _{200mm (-)} , landscape ^{1400mm (+)} / _{1400mm (-)} Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	MC4 Compatible
Per Pallet	36pcs
Per Container(40'HQ)	936pcs

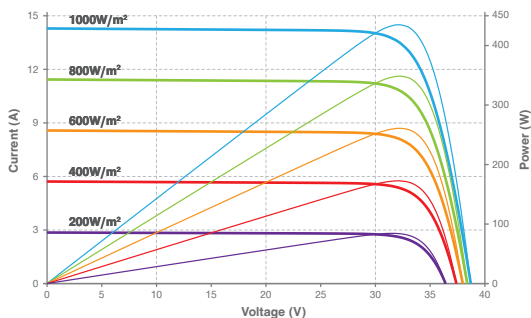


Electrical Performance Parameters

Model Type		415C(HBB)54(182)		420C(HBB)54(182)		425C(HBB)54(182)		430C(HBB)54(182)		435C(HBB)54(182)	
Testing Condition		STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Nominal Max. Power	P _{MAX} (W)	415	311	420	315	425	319	430	323	435	327
Max. Power Voltage	V _{MP} (V)	31.00	29.23	31.23	29.44	31.46	29.65	31.69	29.86	31.92	30.07
Max. Power Current	I _{MP} (A)	13.39	10.64	13.45	10.70	13.51	10.76	13.57	10.82	13.63	10.88
Open Circuit Voltage	V _{OC} (V)	39.68	34.10	39.83	34.28	39.98	34.47	40.13	34.66	40.28	34.85
Short Circuit Current	I _{SC} (A)	14.64	11.87	14.70	11.92	14.76	11.97	14.82	12.02	14.88	12.07
Module Efficiency	(%)	21.25		21.51		21.76		22.02		22.28	

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5; NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s; Power measurement tolerance ±3%.

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



Bifacial Output-rearside Power Gain

5%	Maximum Power	P _{MAX} (W)	436	441	446	452	457
	Module Efficiency	(%)	22.31	22.58	22.85	23.12	23.39
10%	Maximum Power	P _{MAX} (W)	457	462	468	473	479
	Module Efficiency	(%)	23.38	23.66	23.94	24.22	24.50
25%	Maximum Power	P _{MAX} (W)	519	525	531	538	544
	Module Efficiency	(%)	26.57	26.89	27.21	27.53	27.85

Temperature Characteristics

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

Maximum Parameters

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