

LTH series

630-650W

**182-78 N-TOPCon
Dual-glass Bifacial Module**



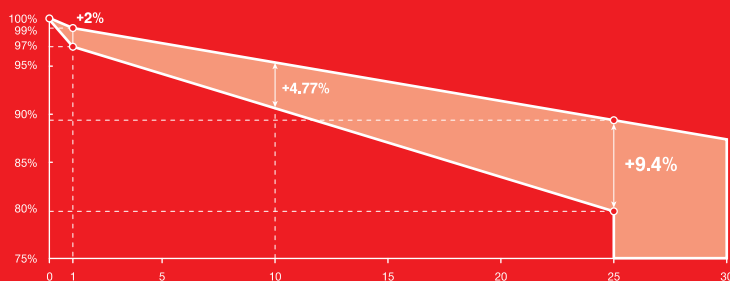
12 years product
workmanship warranty



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.



High density packaging, improving energy density.



Even cloudy or foggy days, better weak illumination response.



Zero LID, increase power generation.



Better temperature coefficient, more power generation.



Higher power output, lower bos cost.



Multiple weather, resistance tests, wider applicability.



Double-sided generation, powerfully energy boost.

LESSO 182 N-TOPCon Dual-glass Bifacial Module (78)



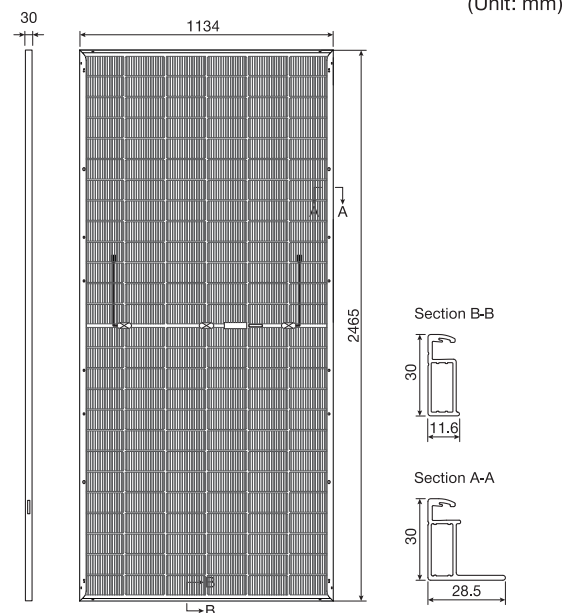
Power Range
630W ~ 650W



Maximum Efficiency
23.25%

Structure Performance

Solar Cell Type	182mm N-TOPCon Mono Cell (Half Cell)
Solar Cell Arrangement	156pcs(6x26)
Module Dimension	2465×1134×30mm
Weight	33.5kg
Front Glass	2.0mm, highly transparent tempered glass with anti-reflective coating
Frame	Anodized Aluminum Alloy
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)	576pcs

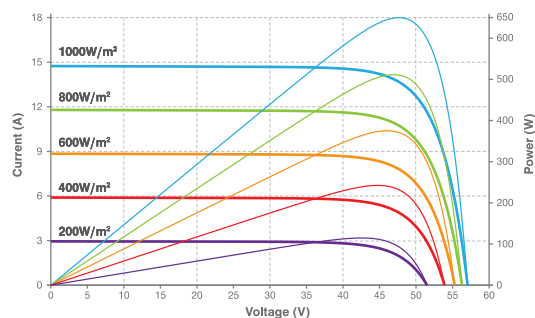


Electrical Performance Parameters

Model Type		630C(HBD)78(182)	635C(HBD)78(182)	640C(HBD)78(182)	645C(HBD)78(182)	650C(HBD)78(182)
Nominal Max. Power	P _{MAX} (W)	630	635	640	645	650
Max. Power Voltage	V _{MPP} (V)	46.37	46.50	46.63	46.76	46.89
Max. Power Current	I _{MPP} (A)	13.59	13.66	13.73	13.80	13.87
Open Circuit Voltage	V _{OC} (V)	56.46	56.61	56.76	56.91	57.06
Short Circuit Current	I _{SC} (A)	14.42	14.50	14.58	14.66	14.74
Module Efficiency	(%)	22.54	22.72	22.90	23.07	23.25

* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5; Power measurement tolerance ±3%.

Current-Voltage & Power-Voltage Curve (650W)



Bifacial Output-rearside Power Gain

	Maximum Power	P _{MAX} (W)	662	667	672	677	683
5%	Module Efficiency	(%)	23.66	23.85	24.04	24.23	24.42
10%	Maximum Power	P _{MAX} (W)	693	699	704	710	715
	Module Efficiency	(%)	24.79	24.99	25.19	25.38	25.58
25%	Maximum Power	P _{MAX} (W)	788	794	800	806	813
	Module Efficiency	(%)	28.17	28.40	28.62	28.84	29.07

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