


Pure Black series

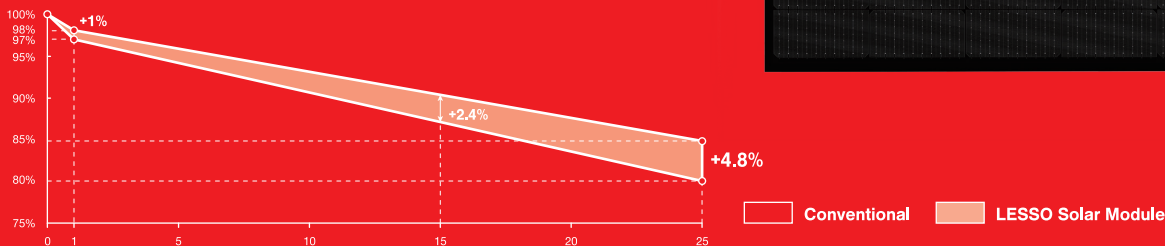
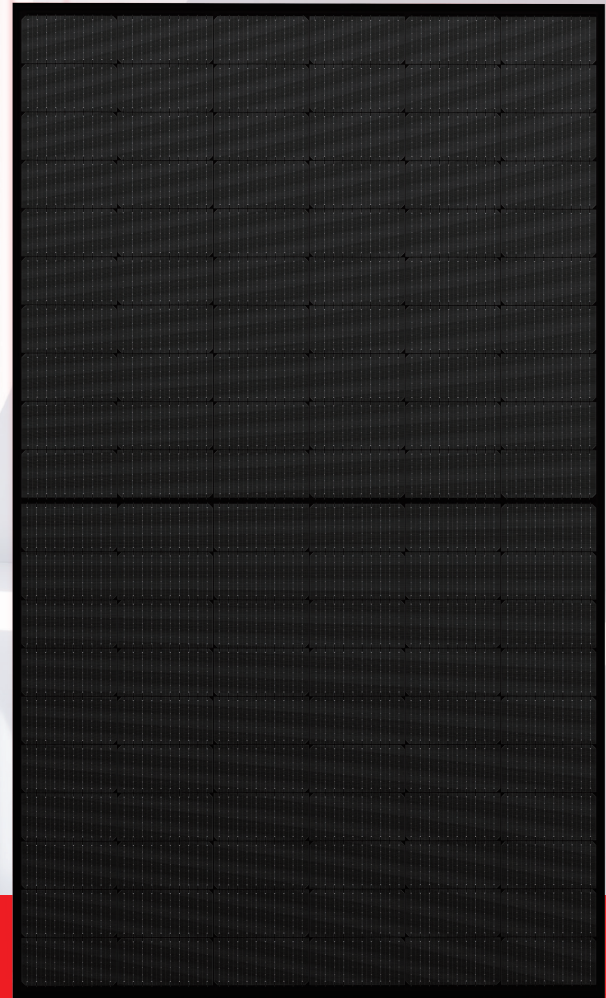
182 P-type Monofacial Module

445W ~ 455W

 **12** years product workmanship warranty

 **25** years linear power output warranty

 **2%** 1st-year degradation
0.55% annual degradation



FEATURES AND BENEFITS



High efficiency PERC, better resistance against PID.



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



Better temperature coefficient, more power generation.



Zero LID, increase power generation.



Even cloudy or foggy days, better weak illumination response.



Multiple weather, resistance tests, wider applicability.

LESSO 182 Pure Black P-type Monofacial Module (60)



Power Range
445W ~ 455W



Power Output Tolerance
0W ~ +5W

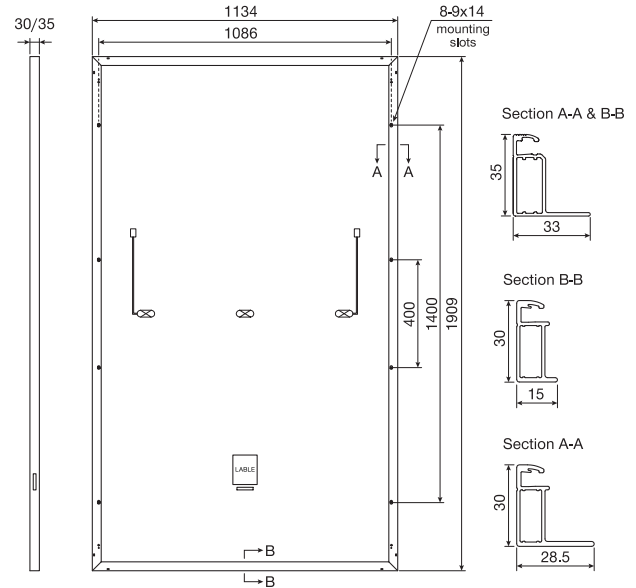


Maximum Efficiency
21.02%

Structure Performance

Solar Cell Type	182mm Mono-crystalline (Half Cell)
Solar Cell Arrangement	120pcs(6×20)
Module Dimension	1909×1134×35mm/30mm
Weight	23.2kg(35mm) / 22.1kg(30mm)
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	Black
Frame	Anodized Aluminum Alloy (Black)
Junction Box	IP68 rated
Cable	4mm ² , portrait ^{400mm (+)} / _{230mm (-)} , landscape ^{1400mm (+)} / _{1400mm (-)} Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	MC4 Compatible
Per Pallet	31pcs(35mm) / 36pcs(30mm)
Per Container(40'HQ)	744pcs(35mm) / 864pcs(30mm)

(Unit: mm)

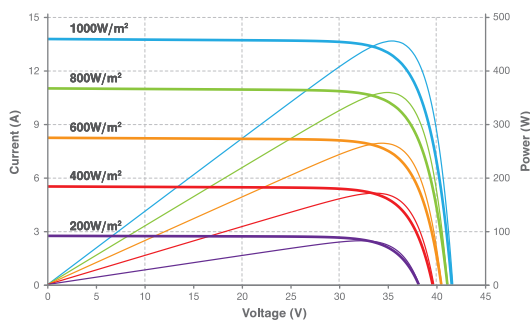


Electrical Performance Parameters

Model Type	445D(BPM)60(182)		450D(BPM)60(182)		455D(BPM)60(182)		
	STC	NMOT	STC	NMOT	STC	NMOT	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	
Nominal Max. Power	P_{MAX} (W)	445	325	450	330	455	335
Max. Power Voltage	V_{MP} (V)	34.42	31.44	34.62	31.64	34.82	31.84
Max. Power Current	I_{MP} (A)	12.93	10.34	13.00	10.43	13.07	10.53
Open Circuit Voltage	V_{OC} (V)	41.18	38.68	41.38	38.88	41.58	39.08
Short Circuit Current	I_{SC} (A)	13.66	10.97	13.72	11.17	13.78	11.37
Module Efficiency	(%)	20.56		20.79		21.02	

* 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 (455D)



Temperature Characteristics

Nominal Module Operating Temperature	44±2°C
Temperature Coefficient (I_{SC})	+0.048%
Temperature Coefficient (V_{OC})	-0.26%
Temperature Coefficient (P_{MAX})	-0.34%

Maximum Parameters

Working Temperature	-40~+85°C
Maximum System Voltage	1500V DC
Nominal Maximum Fuse Current	25A