


210 P-type series

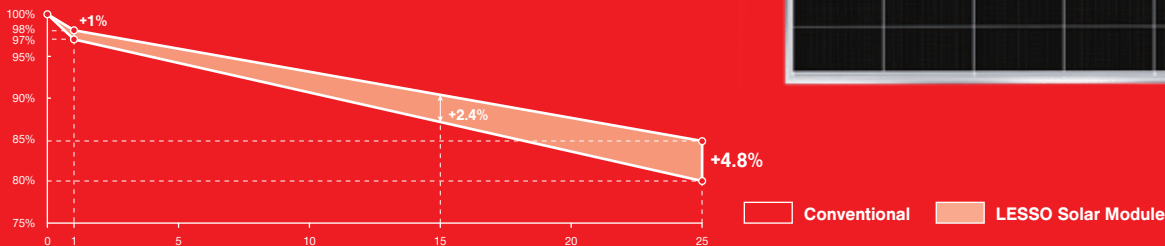
210 P-type Monofacial Module

645W ~ 665W







 **12** years product workmanship warranty

 **25** years linear power output warranty

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



FEATURES AND BENEFITS

-  The application of multi-busbar (MBB) half-cut cell technology brings stronger resistance to shade and lower risk of hot spot.
-  Strict control on raw materials and process optimization of high efficiency PERC ensure better resistance against PID of PV module.
-  Through harsh weathering tests of sand, dust, salt mist, ammonia, etc., to get stronger weather resistance of outdoor environment.
-  By series and parallel design, to reduce the series RS and achieve higher power output and lower BOS cost.
-  Lower temperature coefficient and lower operating temperature can ensure higher power generation.
-  Lower oxygen and carbon content result in lower LID.

LESSO 210 P-type Monofacial Module



Power Range
645W ~ 665W



Power Output Tolerance
0W ~ +5W

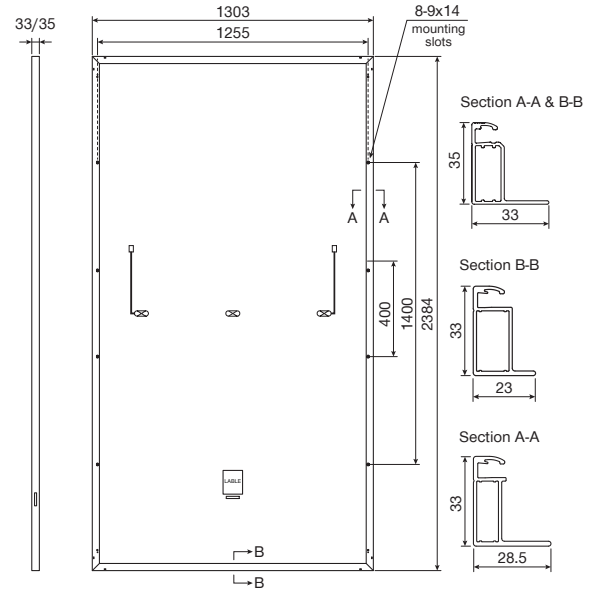


Maximum Efficiency
21.41%

Structure Performance

Solar Cell Type	210mm Mono-crystalline (Half Cell)
Solar Cell Arrangement	132pcs(6x22)
Module Dimension	2384×1303×35mm/33mm
Weight	33.8kg(35mm) / 33.3kg(33mm)
Front Glass	3.2mm, highly transparent tempered glass with anti-reflective coating
Back Sheet	White
Frame	Anodized Aluminum Alloy
Junction Box	IP68 rated
Cable	4mm ² , portrait ^{400mm (+)} / _{300mm (-)} , landscape ^{1400mm (+)} / _{1400mm (-)} Length can be customized
Diode Quantity	3 pcs
Front side / Rear side	5400pa / 2400pa
Connector	MC4 Compatible
Per Pallet	31pcs(35mm) / 33pcs(33mm)
Per Container(40'HQ)	558pcs(35mm) / 594pcs(33mm)

(Unit: mm)



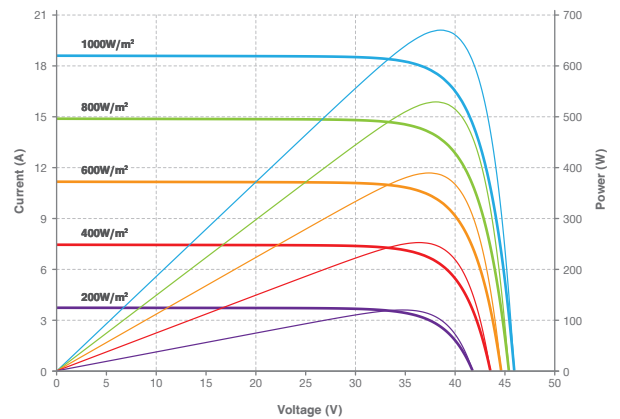
Electrical Performance Parameters | STC

Model Type	645D(HPM) 66(210)	650D(HPM) 66(210)	655D(HPM) 66(210)	660D(HPM) 66(210)	665D(HPM) 66(210)	
Nominal Max. Power	P _{max} (W)	645	650	655	660	665
Max. Power Voltage	V _{mp} (V)	37.30	37.50	37.70	37.90	38.10
Max. Power Current	I _{mp} (A)	17.30	17.34	17.38	17.42	17.46
Open Circuit Voltage	V _{oc} (V)	45.00	45.20	45.40	45.60	45.80
Short Circuit Current	I _{sc} (A)	18.38	18.42	18.46	18.50	18.54
Module Efficiency	(%)	20.76	20.92	21.09	21.25	21.41
Power Output Tolerance	(W)	0~+5W				

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

* Power measurement tolerance ±3%.

Current-Voltage & Power-Voltage Curve (670D)



Electrical Performance Parameters | NMOT

Model Type	645D(HPM) 66(210)	650D(HPM) 66(210)	655D(HPM) 66(210)	660D(HPM) 66(210)	665D(HPM) 66(210)	
Nominal Max. Power	P _{max} (W)	488	492	496	500	504
Max. Power Voltage	V _{mp} (V)	34.74	34.92	35.04	35.28	35.48
Max. Power Current	I _{mp} (A)	14.05	14.09	14.13	14.18	14.21
Open Circuit Voltage	V _{oc} (V)	42.50	42.70	42.90	43.10	43.20
Short Circuit Current	I _{sc} (A)	14.82	14.86	14.90	14.94	14.98

* NMOT: Irradiance 800W/m², Cell Temperature 20°C, Wind Speed 1m/s.

* Power measurement tolerance ±3%.

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	30A