

# 430-460 Watt LS-6B144

**Half-Cell MBB MONO PERC Bifacial Dual-Glass**

## KEY FEATURES



**Multi Busbar Solar Cell**  
Stronger current collection ability, Special circuit design with much lower hot spot temperature;



**Module efficiency up to 21.16%**  
Half cell structure brings low resistance characteristic, higher lifetime generating capacity, simultaneously lower annual power attenuation;



**PID Resistant**  
PID free, due to the POE material and double glass design, also can be improved to meet higher standards for the particularly harsh environment;



**Low-Light Performance**  
Excellent power generation performance under Low-Light condition due to multi busbar; better shading response benefit from half cell module;



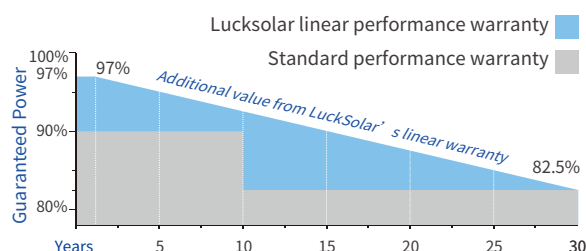
**Anti-Crack**  
Excellent anti-microcracking performance with more balanced interior stress;



**Strength and Durability**  
Certified for 5400Pa snow and 2400Pa loads test;

## Linear Performance Warranty

15 Years Product Warranty · 30 Years Linear Power Warranty



## Product And Quality Certifications

ISO 9001:2008  
ISO 14001:2004  
OHSAS 18001:2007



HQ: No.99, Longxi Avenue, Zhulin Town, Jintan District, Changzhou. Division: No.16, Zhouzhuang Technology Park, Jiepai Town, Binhai County, Yancheng.

Luck Solar is the world's leading green energy provider, committed to making clean energy illuminate every corner of the world. We strive to provide high-efficiency, high-quality and low-cost clean energy solutions. Luck Solar insists on continuous innovation around customer needs. We invest heavily in technology research, and promotes green energy in the world.

+86 519 68905758

service@lucksolar.com

www.lucksolar.com

## ELECTRICAL SPECIFICATIONS

Module Type	LS-6B144-430		LS-6B144-435		LS-6B144-440		LS-6B144-445		LS-6B144-450		LS-6B144-455		LS-6B144-460	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Rated output (Pmp/Wp)	430	321.1	435	324.9	440	328.6	445	332.3	450	336.1	455	339.8	460	343.5
Rated voltage (Vmp/V)	40.6	37.9	40.8	38.0	41.0	38.2	41.2	38.4	41.4	38.6	41.6	38.8	41.8	39.0
Rated current (Imp/A)	10.60	8.49	10.66	8.54	10.73	8.60	10.80	8.65	10.87	8.70	10.93	8.76	11.00	8.81
Open circuit voltage (Voc/V)	48.9	45.8	49.1	45.9	49.2	46.0	49.4	46.2	49.6	46.4	49.8	46.6	50.0	46.8
Short circuit current (Isc/A)	11.30	9.13	11.36	9.18	11.45	9.25	11.52	9.30	11.58	9.36	11.65	9.41	11.72	9.47
Module efficiency (%)	19.78%		20.01%		20.24%		20.47%		20.70%		20.93%		21.16%	
Power Tolerance (W)	0~+5		0~+5		0~+5		0~+5		0~+5		0~+5		0~+5	

Standard Test Condition(STC): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5  
Nominal module operating(NMOT): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM1.5, Wind Speed 1m/s

## Electrical characteristics with different rear side power gain (reference to 445W front)

Power Gain(Pmax gain)	5%	10%	15%	20%	25%
Rated output (Pmp/Wp)	467	490	512	534	556
Rated voltage (Vmp/V)	41.2	41.2	41.3	41.3	41.3
Rated current (Imp/A)	11.34	11.88	12.42	12.96	13.50
Open circuit voltage (Voc/V)	49.4	49.4	49.5	49.5	49.5
Short circuit current (Isc/A)	12.09	12.67	13.24	13.82	14.40

## TEMPERATURE CHARACTERISTICS

NMOT	45°C ±2°C
Temperature Coefficient (Pmax)	-0.350%/°C
Temperature Coefficient (Voc)	-0.284%/°C
Temperature Coefficient (Isc)	0.050%/°C

## MAXIMUM RATINGS

Maximum system voltage (IEC)	1500V DC
Snow/Wind	5400Pa/2400Pa
Operating Temperature	-40°C ~ +85°C
Maximum series fuse rating	15A

## MECHANICAL SPECIFICATIONS

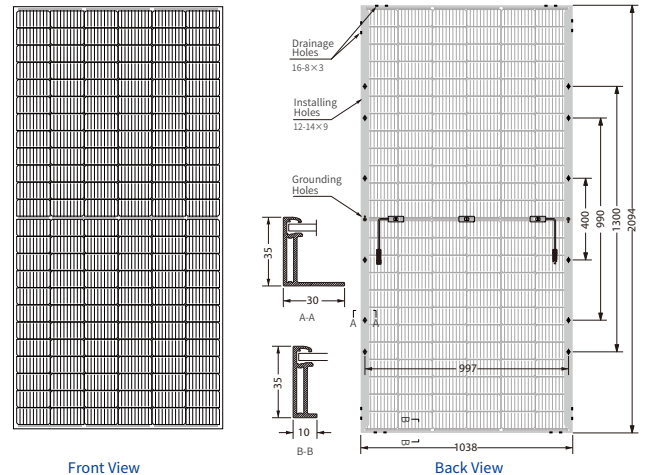
Cell Type	9BB MONO
No. of Cells	144 (12×12)
Dimensions	2094×1038×35mm
Weight	27.5kg
Glass	Dual glass, 2.0mm Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy (silver or black)
Junction Box	IP67/IP68, 3 diodes
Output Cables	4mm <sup>2</sup> , (+)300mm, (-) 300mm or Customized Length
Connector type	MC4 compatible

## PACKING CONFIGURATIONS

Per Pallet	30 Pcs
Per 40' HQ Container	660 Pcs

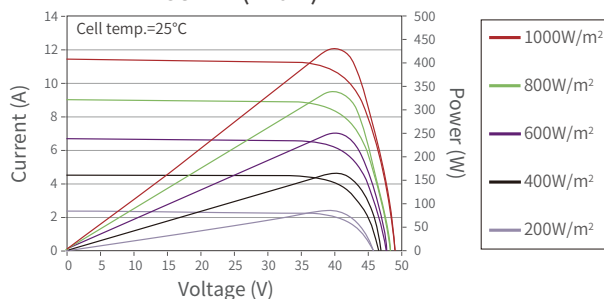
## ENGINEERING DRAWINGS

### Engineering Drawings



## CURVE & TEMPERATURE DEPENDENCE

### I-V CURVE (440W)



### Current-Voltage curves (440W)

