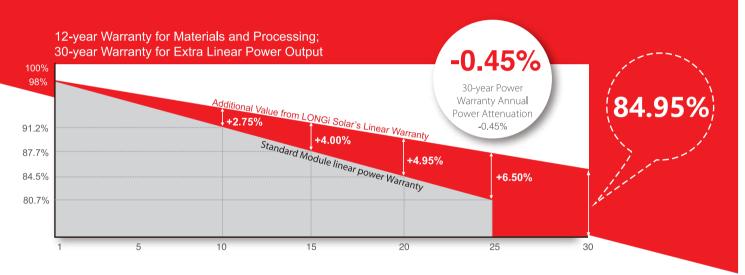


# LR5-72HBD **520~540M**



## High Efficiency Low LID Bifacial PERC with Half-cut Technology



### **Complete System and Product Certifications**

IEC 61215, IEC 61730, UL 61730

ISO 9001:2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Management System

TS62941: Guideline for module design qualification and type approval OHSAS 18001: 2007 Occupational Health and Safety







 Specifications subject to technical changes and tests. LONGi Solar reserves the right of interpretation.

### Front side performance equivalent to conventional low LID mono PERC:

- High module conversion efficiency (up to 21.1%)
- Better energy yield with excellent low irradiance performance and temperature coefficient
- First year power degradation <2%

Bifacial technology enables additional energy harvesting from rear side (up to 25%)

**Glass/glass lamination** ensures 30 year product lifetime, with annual power degradation < 0.45%, 1500V compatible to reduce BOS cost

**Solid PID resistance** ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss with lower operating current

Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current



Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LONGi have the sole right to make such modification at anytime without further notice; Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.

# LR5-72HBD **520~540M**

### Design (mm)

# 1133

### **Mechanical Parameters**

Cell Orientation: 144 (6×24)
Junction Box: IP68, three diodes
Output Cable: 4mm², 300mm in length,
length can be customized

Glass: Dual glass

2.0mm coated tempered glass **Frame:** Anodized aluminum alloy frame

Weight: 32.3kg

Dimension: 2256×1133×35mm

Packaging: 31pcs per pallet

155pcs per 20'GP

620pcs per 40'HC

### **Operating Parameters**

Operational Temperature: -40  $^{\circ}$  C  $^{\circ}$  +85  $^{\circ}$ C Power Output Tolerance: 0  $^{\circ}$  +5  $^{\circ}$ W Voc and Isc Tolerance: ±3%

 $\label{eq:Maximum System Voltage: DC1500V (IEC/UL)} Maximum Series Fuse Rating: 30A \\ Nominal Operating Cell Temperature: 45<math>\pm2$  C

Safety Protection Class: Class II
Fire Rating: UL type 3
Bifaciality: 70±5%

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Electrical Characteristics Test uncertainty for Pmax: ±3%											
Model Number	LR5-72H	BD-520M	LR5-72H	BD-525M	LR5-72H	BD-530M	LR5-72H	BD-535M	LR5-72H	BD-540M	
Testing Condition	STC	NOCT									
Maximum Power (Pmax/W)	520	388.3	525	392.1	530	395.8	535	399.5	540	403.3	
Open Circuit Voltage (Voc/V)	48.90	45.75	49.05	45.89	49.20	46.03	49.35	46.17	49.50	46.31	
Short Circuit Current (Isc/A)	13.57	10.97	13.65	11.03	13.71	11.08	13.78	11.14	13.85	11.19	
Voltage at Maximum Power (Vmp/V)	41.05	38.27	41.20	38.41	41.35	38.55	41.50	38.69	41.65	38.83	
Current at Maximum Power (Imp/A)	12.67	10.15	12.75	10.21	12.82	10.27	12.90	10.33	12.97	10.39	
Module Efficiency(%)	20.3		20.5		20.7		20.9		21.1		
STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5											

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

### Electrical characteristics with different rear side power gain (reference to 530W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
557	49.20	14.40	41.35	13.46	5%
583	49.20	15.08	41.35	14.10	10%
610	49.30	15.77	41.45	14.74	15%
636	49.30	16.46	41.45	15.38	20%
663	49.30	17.14	41.45	16.02	25%

### **Temperature Ratings (STC)**

### **Mechanical Loading**

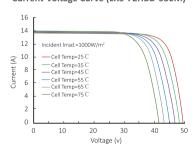
Temperature Coefficient of Isc +0.050%/ C Front Side Maximum Static Loading 5400Pa

Temperature Coefficient of Voc -0.284%/ C Rear Side Maximum Static Loading 2400Pa

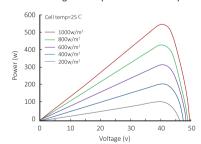
Temperature Coefficient of Pmax -0.350%/ C Hailstone Test 25mm Hailstone at the speed of 23m/s

### I-V Curve

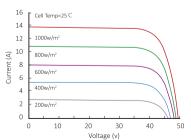
### Current-Voltage Curve (LR5-72HBD-530M)



### Power-Voltage Curve (LR5-72HBD-530M)



### Current-Voltage Curve (LR5-72HBD-530M)





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