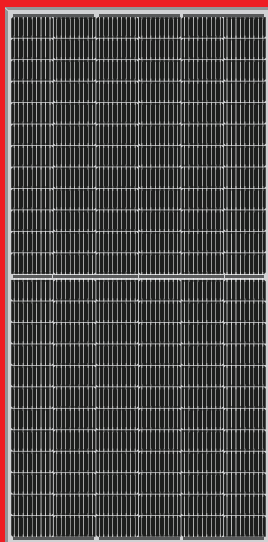
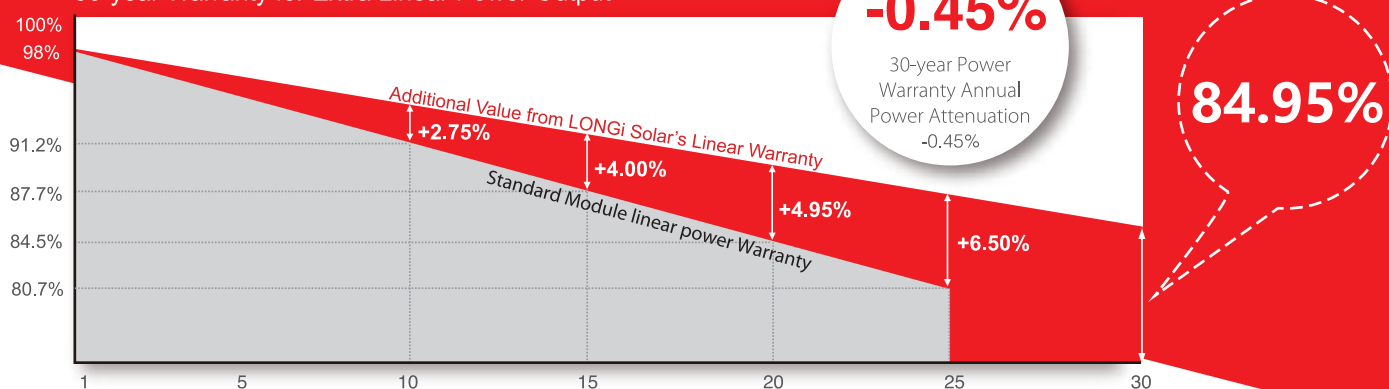


# LR5-72HBD 520~540M



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

12-year Warranty for Materials and Processing;  
30-year Warranty for Extra Linear Power Output



## 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

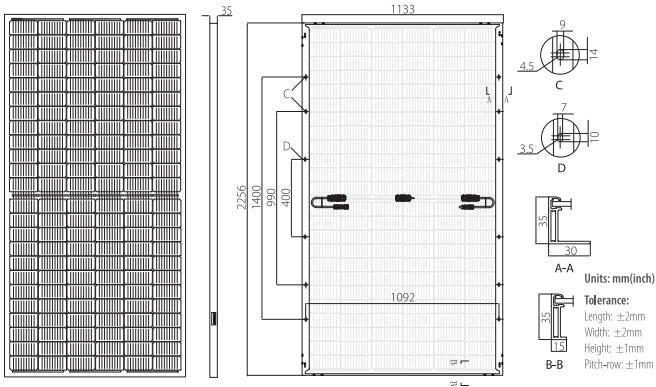
# LONGi

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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)



## Mechanical Parameters

Cell Orientation: 144 (6×24)  
 Junction Box: IP68, three diodes  
 Output Cable: 4mm<sup>2</sup>, 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 C ~ +85 C  
 Power Output Tolerance: 0 ~ +5 W  
 Voc and Isc Tolerance: ±3%  
 Maximum System Voltage: DC1500V (IEC/UL)  
 Maximum Series Fuse Rating: 30A  
 Nominal Operating Cell Temperature: 45±2 C  
 Safety Protection Class: Class II  
 Fire Rating: UL type 3  
 Bifaciality: 70±5%

## Electrical Characteristics

Test uncertainty for Pmax: ±3%

Model Number	LR5-72HBD-520M		LR5-72HBD-525M		LR5-72HBD-530M		LR5-72HBD-535M		LR5-72HBD-540M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	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/m<sup>2</sup>, Cell Temperature 25 C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, 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)

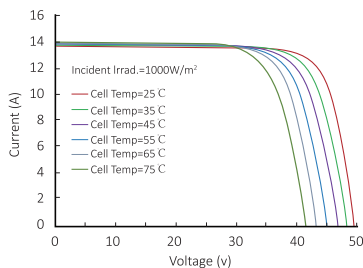
Temperature Coefficient of Isc: +0.050%/C  
 Temperature Coefficient of Voc: -0.284%/C  
 Temperature Coefficient of Pmax: -0.350%/C

## Mechanical Loading

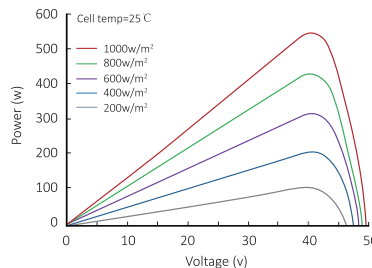
Front Side Maximum Static Loading: 5400Pa  
 Rear Side Maximum Static Loading: 2400Pa  
 Hailstone Test: 25mm Hailstone at the speed of 23m/s

## I-V Curve

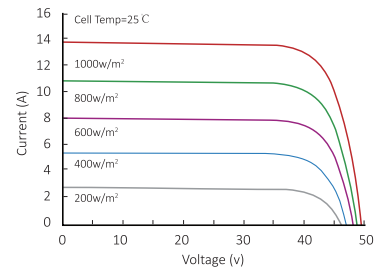
Current-Voltage Curve (LR5-72HBD-530M)



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



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



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