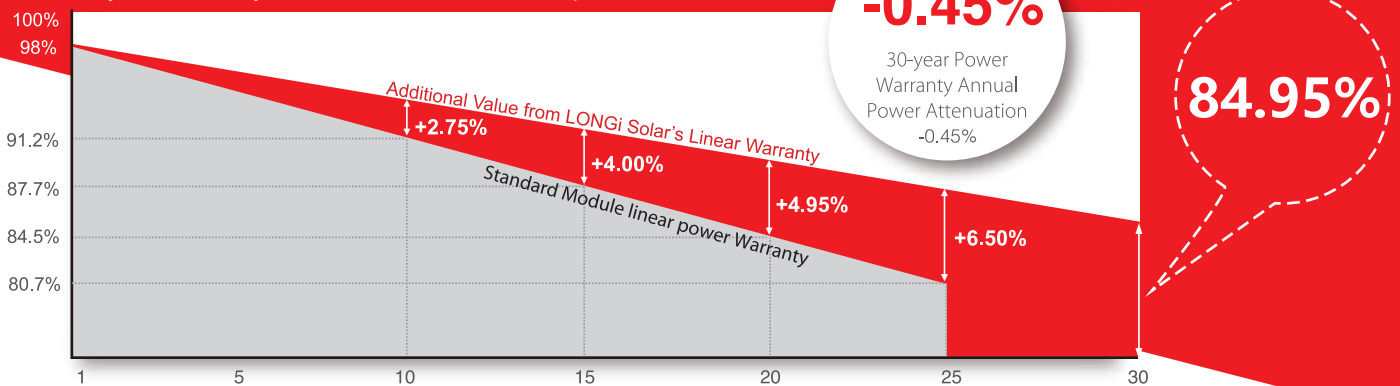


LR4-60HBD 350~380M



**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.

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Front side performance equivalent to conventional low LID mono PERC:

- High module conversion efficiency (up to 20.9%)
- 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

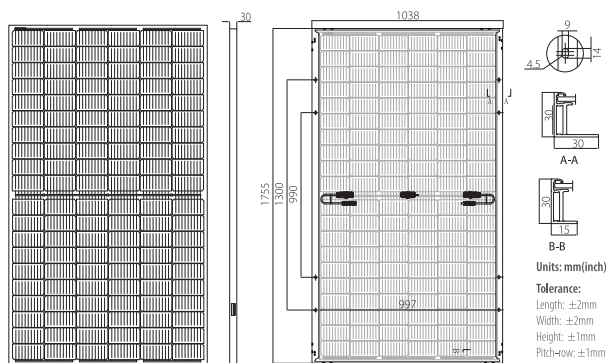
Reduced hot spot risk with optimized electrical design and lower operating current

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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.

LR4-60HBD 350~380M

Design (mm)



Mechanical Parameters

Cell Orientation: 120° (6×20)
 Junction Box: IP68, three diodes
 Output Cable: 4mm², 1200mm in length
 (for EU DG)
 Glass: Dual glass
 2.0mm coated tempered glass
 Frame: Anodized aluminum alloy frame
 Weight: 23.3kg
 Dimension: 1755×1038×30mm
 Packaging: 35pcs per pallet
 210pcs per 20'GP
 910pcs per 40'HC

Operating Parameters

Operational Temperature: -40°C ~ +85°C
 Power Output Tolerance: 0 ~ +5 W
 Voc and Isc Tolerance: $\pm 3\%$
 Maximum System Voltage: DC1500V (IEC/UL)
 Maximum Series Fuse Rating: 25A
 Nominal Operating Cell Temperature: 45 ± 2 °C
 Safety Class: Class II
 Fire Rating: UL type 3
 Bifaciality: Glazing 70 $\pm 5\%$

Electrical Characteristics

Test uncertainty for Pmax: $\pm 3\%$

Model Number	LR4-60HBD-350M		LR4-60HBD-355M		LR4-60HBD-360M		LR4-60HBD-365M		LR4-60HBD-370M		LR4-60HBD-375M		LR4-60HBD-380M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	350	261.4	355	265.1	360	268.8	365	272.6	370	276.3	375	280.0	380	283.8
Open Circuit Voltage (Voc/V)	40.1	37.5	40.3	37.7	40.5	37.9	40.7	38.1	40.9	38.3	41.1	38.5	41.3	38.6
Short Circuit Current (Isc/A)	11.15	9.01	11.24	9.08	11.33	9.15	11.41	9.22	11.50	9.29	11.58	9.36	11.67	9.43
Voltage at Maximum Power (Vmp/V)	33.5	31.2	33.7	31.4	33.9	31.6	34.1	31.8	34.3	32.0	34.5	32.2	34.7	32.4
Current at Maximum Power (Imp/A)	10.45	8.37	10.54	8.44	10.62	8.51	10.71	8.58	10.79	8.64	10.87	8.71	10.96	8.77
Module Efficiency(%)	19.2		19.5		19.8		20.0		20.3		20.6		20.9	

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 365W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
383	40.7	11.99	34.1	11.24	5%
402	40.7	12.56	34.1	11.78	10%
420	40.8	13.13	34.2	12.31	15%
438	40.8	13.70	34.2	12.85	20%
456	40.8	14.27	34.2	13.38	25%

Temperature Ratings (STC)

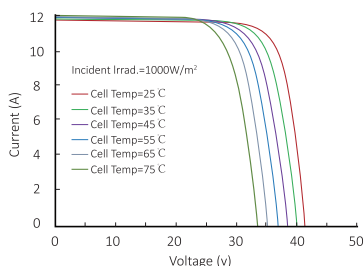
Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.284%/°C
Temperature Coefficient of Pmax	-0.350%/°C

Mechanical Loading

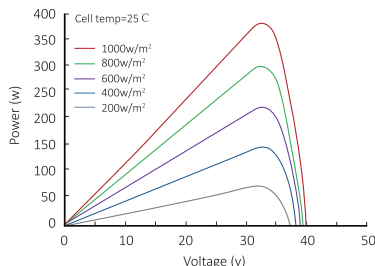
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve

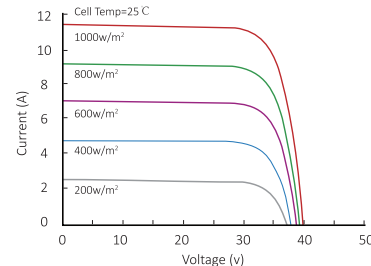
Current-Voltage Curve (LR4-60HBD-365M)



Power-Voltage Curve (LR4-60HBD-365M)



Current-Voltage Curve (LR4-60HBD-365M)



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