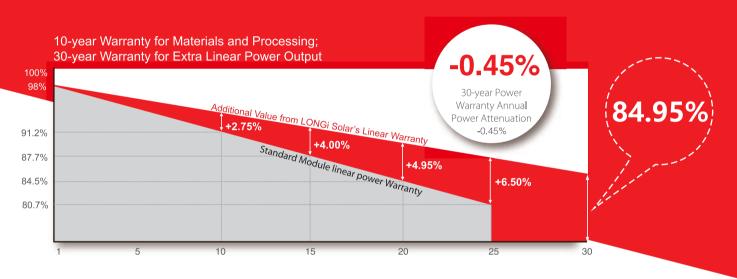


# 1R6-60HBD 300~325M

High Efficiency Low LID Bifacial PERC with Half-cut Technology



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

IEC 61215, IEC61730, UL1703

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 19.2%)
- 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

30mm frame design enables easy installation and robust mechanical strength

**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 Solar 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.

## LR6-60HBD 300~325M

### Design (mm)

# 30 996 AA SSSS Do Units: mm(inch) B-B Tolerance Leggtt: ±2mm Width: ±2mm Height: ±2mm

### **Mechanical Parameters**

Cell Orientation: 120 (6×20)
Junction Box: IP67, three diodes
Output Cable: 4mm², 300mm in length,
length can be customized
Glass:Dual glass
2.0mm tempered glass

Frame: Anodized aluminum alloy frame Weight: 22.0kg Dimension: 1698×996×30mm

Packaging: 35pcs per pallet 210pcs per 20'GP 910pcs per 40'HC

### **Operating Parameters**

Operational Temperature: -40 °C  $\sim$  +85 °C Power Output Tolerance: 0  $\sim$  +5 W Voc and Isc Tolerance:  $\pm 3\%$ 

Maximum System Voltage: DC1500V (IEC/UL)

Maximum Series Fuse Rating: 20A

Nominal Operating Cell Temperature: 45±2 °C

Safety Class: Class II

Fire Rating: UL type 6

Bifaciality: Coating≥75%

Glazing≥70%

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Electrical Characteristics Test uncertainty for Pmax: ±3%												
Model Number	LR6-60H	BD-300M	LR6-60H	BD-305M	LR6-60H	BD-310M	LR6-60HI	BD-315M	LR6-60H	BD-320M	LR6-60H	BD-325M
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	300	223.1	305	226.8	310	230.5	315	234.2	320	237.9	325	241.7
Open Circuit Voltage (Voc/V)	40.3	37.5	40.5	37.7	40.7	37.9	40.9	38.1	41.1	38.3	41.3	38.5
Short Circuit Current (Isc/A)	9.44	7.64	9.55	7.73	9.66	7.82	9.75	7.90	9.86	7.98	9.95	8.06
Voltage at Maximum Power (Vmp/V)	33.3	30.9	33.5	31.1	33.6	31.2	33.8	31.4	34.0	31.6	34.2	31.8
Current at Maximum Power (Imp/A)	9.01	7.22	9.12	7.30	9.23	7.39	9.32	7.46	9.42	7.54	9.51	7.62
Module Efficiency(%)	17	.7	18	.0	18	3.3	18	.6	1	8.9	19	9.2

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 310W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
326	40.7	10.14	33.6	9.69	5%
341	40.7	10.62	33.6	10.15	10%
357	40.8	11.10	33.7	10.59	15%
372	40.8	11.59	33.7	11.04	20%
388	40.8	12.07	33.7	11.51	25%

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

### **Mechanical Loading**

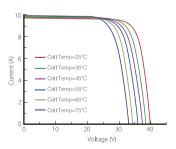
Temperature Coefficient of Isc +0.060%/ C Front Side Maximum Static Loading 5400Pa

Temperature Coefficient of Voc -0.300%/ C Rear Side Maximum Static Loading 2400Pa

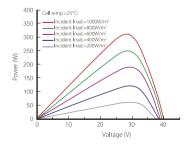
**Temperature Coefficient of Pmax** -0.370%/ C **Hailstone Test** 25mm Hailstone at the speed of 23m/s

### I-V Curve

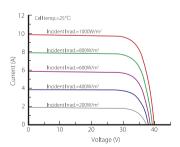
### Current-Voltage Curve (LR6-60HBD-310M)



### Power-Voltage Curve (LR6-60HBD-310M)



### Current-Voltage Curve (LR6-60HBD-310M)





Room 801, Tower 3, Lujiazui Financial Plaza, No.826 Century Avenue, Pudong Shanghai, 200120, China Tel: +86-21-80162606 E-mail: module@longi-silicon.com Facebook: www.facebook.com/LONGi Solar

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