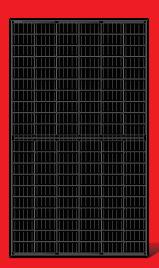
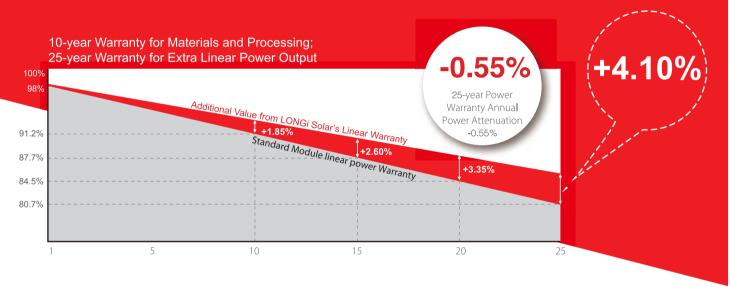
# **REAL BLACK** series



# LR6-60HPB **295~315M**

High Efficiency Low LID Mono PERC with Half-cut Technology



## **Complete System and Product Certifications**

IEC 61215, IEC61730

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.

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 19.0%)

**Slower power degradation** enabled by Low LID Mono PERC technology: first year <2%, 0.55% year 2-25

**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

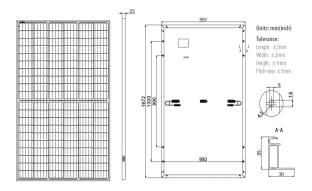
 $\textbf{Reduced hot spot risk} \ \text{with optimized electrical design and lower operating current}$ 



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.

# LR6-60HPB **295~315M**

Design (mm) Mechanical Parameters Operating Parameters



Cell Orientation: 120 (6×20)

Junction Box: IP67, three diodes

Output Cable: 4mm², 1000mm in length

Glass: Single glass

2.8mm coated tempered glass Frame: Anodized aluminum alloy frame

Weight: 16.8kg

Dimension: 1672×991×35mm

Packaging: 30pcs per pallet

180pcs per 20'GP

780pcs per 40'HC

Power Output Tolerance: 0  $^{\sim}$  +5 W

Voc and Isc Tolerance: ±3%

Maximum System Voltage: DC1000V (IEC)

Maximum Series Fuse Rating: 20A

Nominal Operating Cell Temperature: 45±2  $^{\circ}$ C

Safety Class: Class II

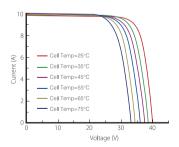
| Model Number                     | LR6-60H | LR6-60HPB-295M |      | LR6-60HPB-300M |      | LR6-60HPB-305M |      | LR6-60HPB-310M |      | LR6-60HPB-315M |  |
|----------------------------------|---------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|--|
| Testing Condition                | STC     | NOCT           | STC  | NOCT           | STC  | NOCT           | STC  | NOCT           | STC  | NOCT           |  |
| Maximum Power (Pmax/W)           | 295     | 218.5          | 300  | 222.2          | 305  | 225.9          | 310  | 229.6          | 315  | 233.4          |  |
| Open Circuit Voltage (Voc/V)     | 39.6    | 36.9           | 39.8 | 37.1           | 40.1 | 37.4           | 40.3 | 37.7           | 40.6 | 37.9           |  |
| Short Circuit Current (Isc/A)    | 9.59    | 7.73           | 9.70 | 7.82           | 9.78 | 7.88           | 9.86 | 7.94           | 9.94 | 8.01           |  |
| Voltage at Maximum Power (Vmp/V) | 32.7    | 30.2           | 32.9 | 30.4           | 33.1 | 30.6           | 33.3 | 30.8           | 33.7 | 31.1           |  |
| Current at Maximum Power (Imp/A) | 9.03    | 7.24           | 9.13 | 7.32           | 9.21 | 7.38           | 9.30 | 7.46           | 9.36 | 7.50           |  |
| Module Efficiency(%)             | 17      | 17.8           |      | 18.1           |      | 18.4           |      | 18.7           |      | 19.0           |  |

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

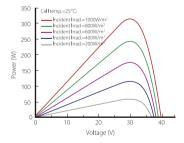
| Temperature Ratings (STC)       |            | Mechanical Loading                |                                      |  |  |  |  |  |
|---------------------------------|------------|-----------------------------------|--------------------------------------|--|--|--|--|--|
| Temperature Coefficient of Isc  | +0.057%/°C | Front Side Maximum Static Loading | 5400Pa                               |  |  |  |  |  |
| Temperature Coefficient of Voc  | -0.286%/°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**

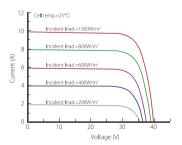
#### Current-Voltage Curve (LR6-60HPB-310M)



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



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





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