

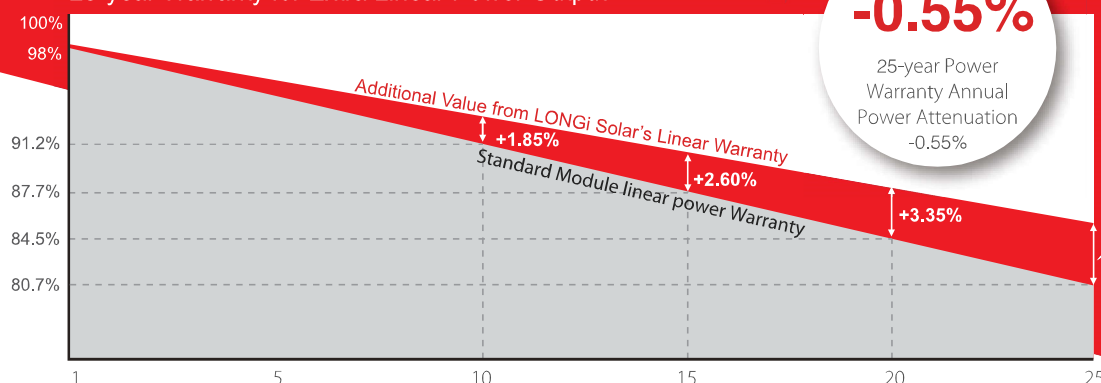
\*Both 6BB & 9BB are available

# LR4-72HIH 425~455M



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

12-year Warranty for Materials and Processing;  
25-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.

**Positive power tolerance** (0 ~ +5W) guaranteed

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

**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

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

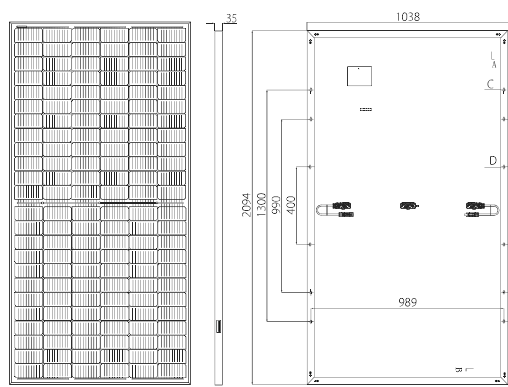
# LONGi

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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.

# LR4-72HIH 425~455M

## Design (mm)



## Mechanical Parameters

Cell Orientation: 144 (6x24)  
 Junction Box: IP68, three diodes  
 Output Cable: 4mm<sup>2</sup>, 300mm in length,  
 length can be customized  
 Glass: Single glass  
 3.2mm coated tempered glass  
 Frame: Anodized aluminum alloy frame  
 Weight: 23.5kg  
 Dimension: 2094×1038×35mm  
 Packaging: 30pcs per pallet  
 150pcs per 20'GP  
 660pcs per 40'HC

## Operating Parameters

Operational Temperature: -40℃ ~ +85℃  
 Power Output Tolerance: 0 ~ +5 W  
 Voc and Isc Tolerance: ±3%  
 Maximum System Voltage: DC1500V (IEC/UL)  
 Maximum Series Fuse Rating: 20A  
 Nominal Operating Cell Temperature: 45±2℃  
 Safety Protection Class: Class II  
 Fire Rating: UL type 1 or 2

## Electrical Characteristics

Test uncertainty for Pmax: ±3%

| Model Number                     | LR4-72HIH-425M |       | LR4-72HIH-430M |       | LR4-72HIH-435M |       | LR4-72HIH-440M |       | LR4-72HIH-445M |       | LR4-72HIH-450M |       | LR4-72HIH-455M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition                | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 425            | 317.4 | 430            | 321.1 | 435            | 324.9 | 440            | 328.6 | 445            | 332.3 | 450            | 336.1 | 455            | 339.8 |
| Open Circuit Voltage (Voc/V)     | 48.3           | 45.3  | 48.5           | 45.5  | 48.7           | 45.7  | 48.9           | 45.8  | 49.1           | 46.0  | 49.3           | 46.2  | 49.5           | 46.4  |
| Short Circuit Current (Isc/A)    | 11.23          | 9.08  | 11.31          | 9.15  | 11.39          | 9.21  | 11.46          | 9.27  | 11.53          | 9.33  | 11.60          | 9.38  | 11.66          | 9.43  |
| Voltage at Maximum Power (Vmp/V) | 40.5           | 37.7  | 40.7           | 37.9  | 40.9           | 38.1  | 41.1           | 38.3  | 41.3           | 38.5  | 41.5           | 38.6  | 41.7           | 38.8  |
| Current at Maximum Power (Imp/A) | 10.50          | 8.42  | 10.57          | 8.47  | 10.64          | 8.53  | 10.71          | 8.59  | 10.78          | 8.64  | 10.85          | 8.70  | 10.92          | 8.75  |
| Module Efficiency(%)             | 19.6           |       | 19.8           |       | 20.0           |       | 20.2           |       | 20.5           |       | 20.7           |       | 20.9           |       |

STC (Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25℃, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20℃, Spectra at AM1.5, Wind at 1m/s

## Temperature Ratings (STC)

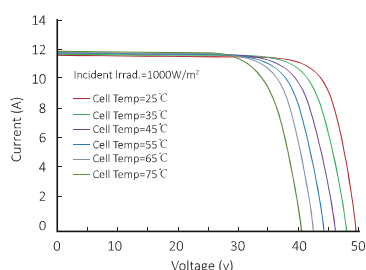
|                                 |           |
|---------------------------------|-----------|
| Temperature Coefficient of Isc  | +0.048%/℃ |
| Temperature Coefficient of Voc  | -0.270%/℃ |
| Temperature Coefficient of Pmax | -0.350%/℃ |

## Mechanical Loading

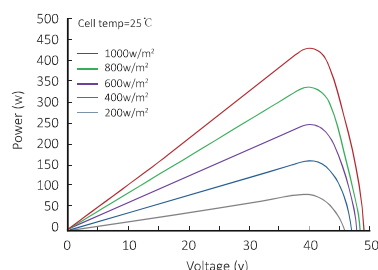
|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Front Side Maximum Static Loading | 5400Pa                               |
| Rear Side Maximum Static Loading  | 2400Pa                         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

## I-V Curve

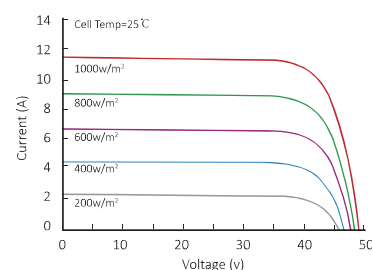
Current-Voltage Curve (LR4-72HIH-440M)



Power-Voltage Curve (LR4-72HIH-440M)



Current-Voltage Curve (LR4-72HIH-440M)



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