

# Hi-MO 5 (V4)

## LR5-72HBD

# 540~560M

- Based on M10 wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
  - M10 Gallium-doped Wafer
  - Integrated Segmented Ribbons
  - 18-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

12

12-year Warranty for Materials and Processing

30

30-year Warranty for Extra Linear Power Output

### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

**LONGI**



**21.7%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

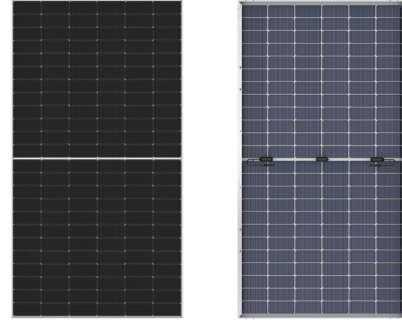
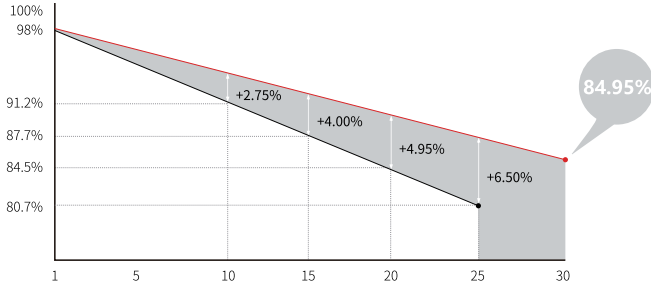
**<2%**  
FIRST YEAR  
POWER DEGRADATION

**0.45%**  
YEAR 2-30  
POWER DEGRADATION

**HALF-CELL**  
Lower operating temperature

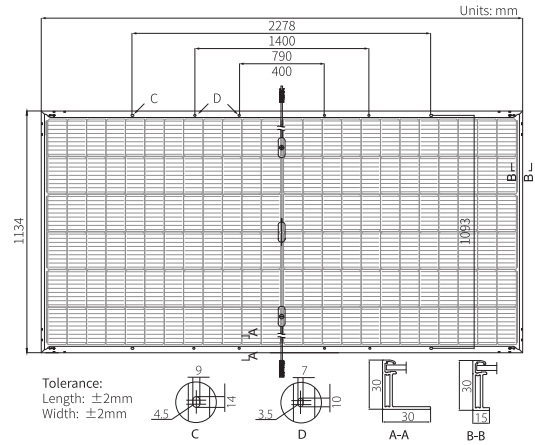
## Additional Value

### 30-Year Power Warranty



## Mechanical Parameters

|                  |   |
|------------------|---|
| Cell Orientation | 144 (6×24)  |
| Junction Box     | IP68, three diodes  |
| Output Cable     | 4mm <sup>2</sup> , +400, -200mm/±1400mm<br>length can be customized               |
| Glass            | Dual glass, 2.0+2.0mm heat strengthened glass                                     |
| Frame            | Anodized aluminum alloy frame   |
| Weight           | 31.8kg  |
| Dimension        | 2278×1134×30mm  |
| Packaging        | 36pcs per pallet / 180pcs per 20' GP / 720pcs or 576pcs (Only for USA) per 40' HC |



## Electrical Characteristics

STC : AM1.5 1000W/m<sup>2</sup> 25°C      NOCT : AM1.5 800W/m<sup>2</sup> 20°C 1m/s      Test uncertainty for Pmax: ±3%

| Module Type                      | LR5-72HBD-540M |       | LR5-72HBD-545M |       | LR5-72HBD-550M |       | LR5-72HBD-555M |       | LR5-72HBD-560M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
|                                  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 540            | 403.6 | 545            | 407.4 | 550            | 411.1 | 555            | 414.8 | 560            | 418.6 |
| Open Circuit Voltage (Voc/V)     | 49.50          | 46.54 | 49.65          | 46.68 | 49.80          | 46.82 | 49.95          | 46.97 | 50.10          | 47.11 |
| Short Circuit Current (Isc/A)    | 13.85          | 11.17 | 13.92          | 11.23 | 13.99          | 11.29 | 14.05          | 11.34 | 14.10          | 11.38 |
| Voltage at Maximum Power (Vmp/V) | 41.65          | 38.86 | 41.80          | 39.00 | 41.95          | 39.14 | 42.10          | 39.28 | 42.25          | 39.42 |
| Current at Maximum Power (Imp/A) | 12.97          | 10.39 | 13.04          | 10.45 | 13.12          | 10.51 | 13.19          | 10.56 | 13.26          | 10.62 |
| Module Efficiency(%)             | 20.9           |       | 21.1           |       | 21.3           |       | 21.5           |       | 21.7           |       |

## Electrical characteristics with different rear side power gain (reference to 550W front)

| Pmax/W | Voc/V | Isc/A | Vmp/V | Imp/A | Pmax gain |
|--------|-------|-------|-------|-------|-----------|
| 578    | 49.80 | 14.68 | 41.95 | 13.77 | 5%        |
| 605    | 49.80 | 15.38 | 41.95 | 14.43 | 10%       |
| 633    | 49.90 | 16.08 | 42.05 | 15.08 | 15%       |
| 660    | 49.90 | 16.78 | 42.05 | 15.74 | 20%       |
| 688    | 49.90 | 17.48 | 42.05 | 16.39 | 25%       |

## Operating Parameters

|                                    |                           |
|------------------------------------|---------------------------|
| Operational Temperature            | -40°C ~ +85°C             |
| Power Output Tolerance             | 0 ~ 3%                    |
| Voc and Isc Tolerance              | ±3%                       |
| Maximum System Voltage             | DC1500V (IEC/UL)          |
| Maximum Series Fuse Rating         | 30A                       |
| Nominal Operating Cell Temperature | 45±2°C                    |
| Protection Class                   | Class II                  |
| Bifaciality                        | 70±5%                     |
| Fire Rating                        | UL type 29<br>IEC Class 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 |

## Temperature Ratings (STC)

|                                 |            |
|---------------------------------|------------|
| Temperature Coefficient of Isc  | +0.050%/°C |
| Temperature Coefficient of Voc  | -0.265%/°C |
| Temperature Coefficient of Pmax | -0.340%/°C |