

# Hi-MO **5m**

## LR5-54HPB 400~420M

- Suitable for distributed projects
- Advanced module technology delivers superior module efficiency
  - M10 Gallium-doped Wafer
  - Integrated Segmented Ribbons
  - 9-busbar Half-cut Cell
- Excellent outdoor power generation performance
- Aesthetic appearance with all black module design

**15**

15-year Warranty for  
Materials and Processing

**25**

25-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

TS62941: Guideline for module design qualification and type approval

**LONGI**



**21.5%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

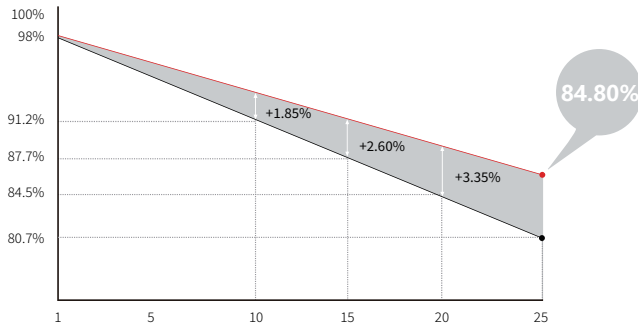
**<2%**  
FIRST YEAR  
POWER DEGRADATION

**0.55%**  
YEAR 2-25  
POWER DEGRADATION

**HALF-CELL**  
Lower operating temperature

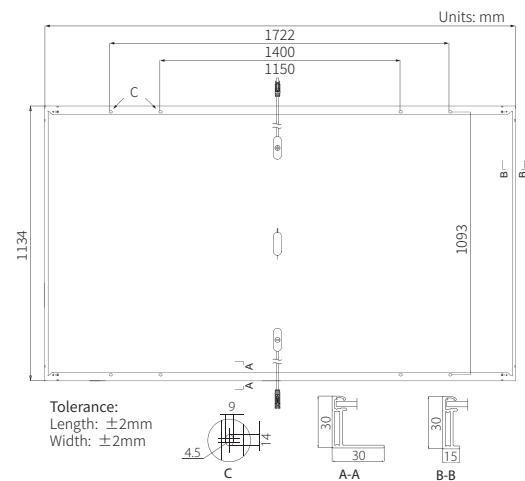
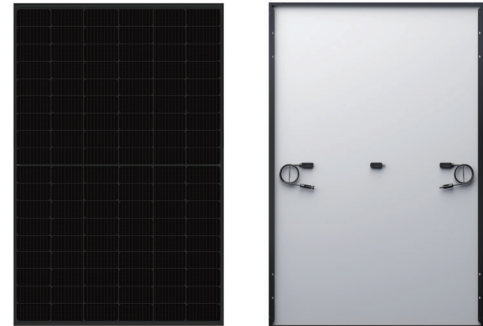
## Additional Value

25-Year Power Warranty



## Mechanical Parameters

|                  |  |
|------------------|--|
| Cell Orientation | 108 (6×18)   |
| Junction Box     | IP68, three diodes                                       |
| Output Cable     | 4mm <sup>2</sup> , 1200mm                                |
| Connector        | Staubli MC4  |
| Glass            | Single glass, 3.2mm coated tempered glass                |
| Frame            | Anodized aluminum alloy frame                            |
| Weight           | 20.8kg   |
| Dimension        | 1722×1134×30mm   |
| Packaging        | 36pcs per pallet / 216pcs per 20' GP / 936pcs 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                      | LR5-54HPB-400M |       | LR5-54HPB-405M |       | LR5-54HPB-410M |       | LR5-54HPB-415M |       | LR5-54HPB-420M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
|                                  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Testing Condition                | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 400            | 299.0 | 405            | 302.7 | 410            | 306.5 | 415            | 310.2 | 420            | 313.9 |
| Open Circuit Voltage (Voc/V)     | 36.90          | 34.70 | 37.15          | 34.93 | 37.40          | 35.17 | 37.65          | 35.40 | 37.89          | 35.63 |
| Short Circuit Current (Isc/A)    | 13.72          | 11.09 | 13.78          | 11.14 | 13.84          | 11.19 | 13.91          | 11.24 | 13.97          | 11.30 |
| Voltage at Maximum Power (Vmp/V) | 30.94          | 28.74 | 31.18          | 28.96 | 31.42          | 29.19 | 31.66          | 29.41 | 31.90          | 29.63 |
| Current at Maximum Power (Imp/A) | 12.93          | 10.40 | 12.99          | 10.45 | 13.05          | 10.50 | 13.11          | 10.55 | 13.17          | 10.59 |
| Module Efficiency(%)             | 20.5           |       | 20.7           |       | 21.0           |       | 21.3           |       | 21.5           |       |

## Operating Parameters

|                                    |                               |
|------------------------------------|-------------------------------|
| Operational Temperature            | -40°C ~ +85°C                 |
| Power Output Tolerance             | 0 ~ 3%                        |
| Voc and Isc Tolerance              | ±3%                           |
| Maximum System Voltage             | DC1000V (IEC/UL)              |
| Maximum Series Fuse Rating         | 25A                           |
| Nominal Operating Cell Temperature | 45±2°C                        |
| Protection Class                   | Class II                      |
| Fire Rating                        | UL type 1 or 2<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 |