

# Hi-MO 6

Scientist

## LR5-54HTH 440~450M

- Suitable for Distribution Market
- Simple design embodies modern style
- Highest efficiency with the best energy generation performance
- Better product warranty, better service



25-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

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



**23.0%**  
MAX MODULE  
EFFICIENCY

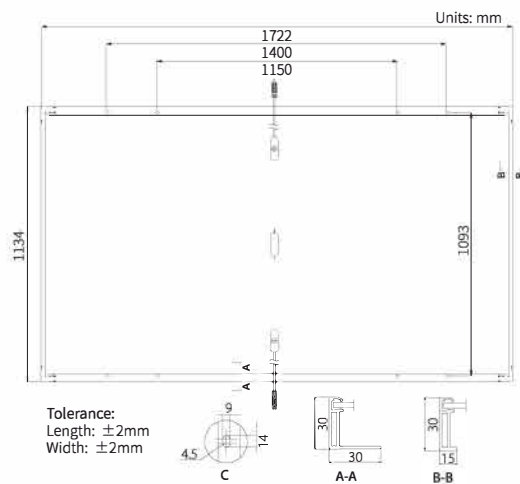
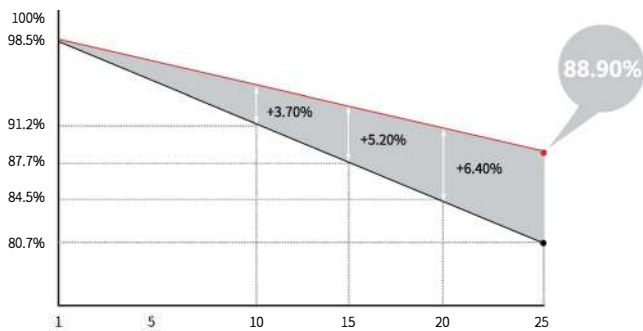
**±5W**  
POWER  
TOLERANCE

**<1.5%**  
FIRST YEAR  
POWER DEGRADATION

**0.40%**  
YEAR 2-25  
POWER DEGRADATION

## 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<br>length can be customized   |
| 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                      | LR5-54HTH-440M |       | LR5-54HTH-445M |       | LR5-54HTH-450M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|
|                                  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 440            | 329   | 445            | 332   | 450            | 336   |
| Open Circuit Voltage (Voc/V)     | 39.53          | 37.11 | 39.73          | 37.30 | 39.93          | 37.49 |
| Short Circuit Current (Isc/A)    | 14.30          | 11.55 | 14.37          | 11.61 | 14.45          | 11.67 |
| Voltage at Maximum Power (Vmp/V) | 33.24          | 30.33 | 33.44          | 30.51 | 33.64          | 30.70 |
| Current at Maximum Power (Imp/A) | 13.24          | 10.85 | 13.31          | 10.90 | 13.38          | 10.95 |
| Module Efficiency(%)             | 22.5           |       | 22.8           |       | 23.0           |       |

## 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         | 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  | -0.230%/°C |
| Temperature Coefficient of Pmax | -0.290%/°C |