

# Hi-MO X10 Explorer

LR7-54HVH  
475~490M

- Suitable for Distribution Market
- Highest efficiency with the best energy generation performance
- TaiRay wafer & BC technology enhances high product reliability
- Smart manufacturing & LONGi product lifecycle standards deliver exceptional product quality

15

15-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**



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## LR7-54HVH 475~490M

**24.0%**  
MAX MODULE  
EFFICIENCY

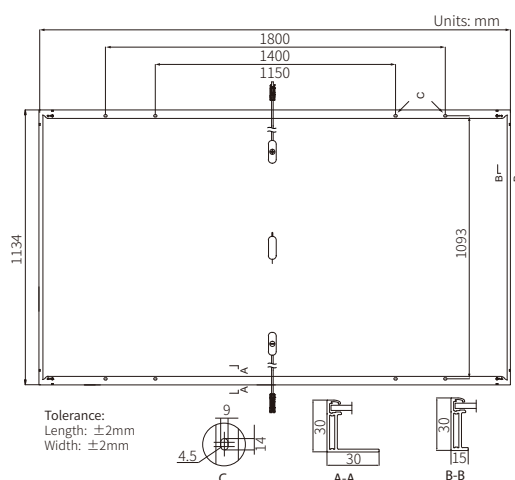
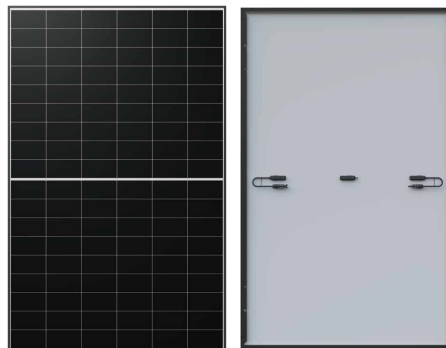
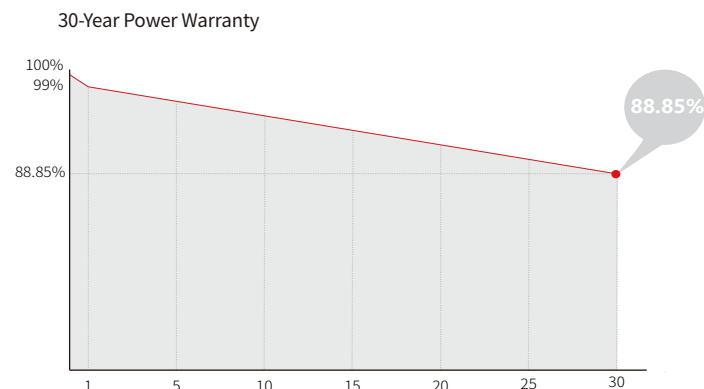
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

**0.35%**  
YEAR 2-30  
POWER DEGRADATION

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

### Additional Value



### Mechanical Parameters

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| Cell Orientation | 108 (6×18)                                                                       |
| Junction Box     | IP68, three diodes                                                               |
| Output Cable     | 4mm <sup>2</sup> , +400, -200mm/ $\pm 1200\text{mm}$<br>length can be customized |
| Glass            | Single glass, 3.2mm coated tempered glass                                        |
| Frame            | Anodized aluminum alloy frame                                                    |
| Weight           | 21.6kg                                                                           |
| Dimension        | 1800×1134×30mm                                                                   |
| Packaging        | 36pcs per pallet / 216pcs per 20' GP / 864pcs 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:  $\pm 3\%$

| Module Type                      | LR7-54HVH-475M |       | LR7-54HVH-480M |       | LR7-54HVH-485M |       | LR7-54HVH-490M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition                | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 475            | 362   | 480            | 365   | 485            | 369   | 490            | 373   |
| Open Circuit Voltage (Voc/V)     | 40.18          | 38.18 | 40.29          | 38.29 | 40.40          | 38.39 | 40.52          | 38.51 |
| Short Circuit Current (Isc/A)    | 15.03          | 12.08 | 15.13          | 12.16 | 15.23          | 12.24 | 15.33          | 12.32 |
| Voltage at Maximum Power (Vmp/V) | 33.16          | 31.52 | 33.28          | 31.63 | 33.40          | 31.74 | 33.51          | 31.85 |
| Current at Maximum Power (Imp/A) | 14.33          | 11.49 | 14.43          | 11.57 | 14.53          | 11.65 | 14.63          | 11.73 |
| Module Efficiency(%)             | 23.3           |       | 23.5           |       | 23.8           |       | 24.0           |       |

### Operating Parameters

|                                    |               |
|------------------------------------|---------------|
| Operational Temperature            | -40°C ~ +85°C |
| Power Output Tolerance             | 0 ~ 3%        |
| Maximum System Voltage             | DC1500V (IEC) |
| Maximum Series Fuse Rating         | 25A           |
| Nominal Operating Cell Temperature | 45 $\pm$ 2°C  |
| Protection Class                   | Class II      |
| Fire Rating                        | 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  | -0.200%/°C |
| Temperature Coefficient of Pmax | -0.260%/°C |

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Specifications included in this datasheet are subject to change without notice.  
LONGI reserves the right of final interpretation. (20241118 BGV02 Draft)