

Hi-MO X10 Scientist

LR7-54HVH 480~500M

- 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

30

30-year Warranty for
Materials and Processing

30

30-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730

ISO9001: Quality Management System

ISO14001: Environment Management System

ISO45001: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

LONGi

THE **smarter**
AWARD **E**



24.5%
MAX MODULE
EFFICIENCY

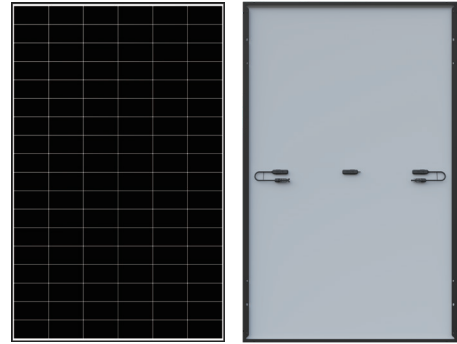
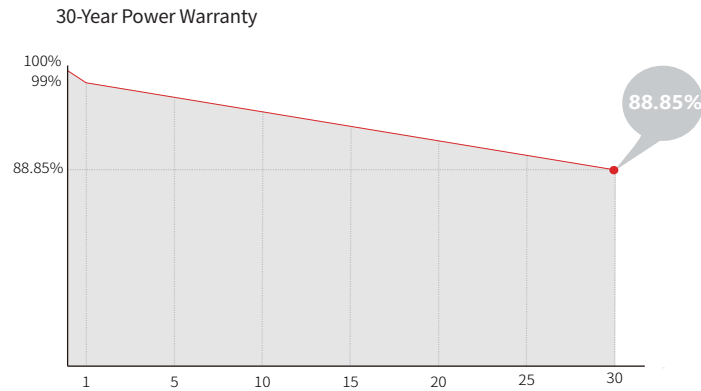
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

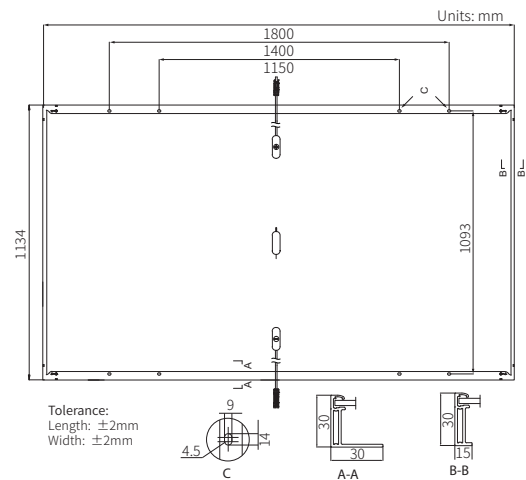
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

| | |
|------------------|---|
| Cell Orientation | 108 (6 × 18) |
| Junction Box | IP68, three diodes |
| Output Cable | 4mm ² , +400, -200mm/±1200mm 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/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for Pmax: ±3%

| Module Type | LR7-54HVH-480M | | LR7-54HVH-485M | | LR7-54HVH-490M | | LR7-54HVH-495M | | LR7-54HVH-500M | |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum Power (Pmax/W) | 480 | 365 | 485 | 369 | 490 | 373 | 495 | 377 | 500 | 381 |
| Open Circuit Voltage (Voc/V) | 40.29 | 38.29 | 40.40 | 38.39 | 40.52 | 38.51 | 40.64 | 38.62 | 40.75 | 38.72 |
| Short Circuit Current (Isc/A) | 15.13 | 12.16 | 15.23 | 12.24 | 15.33 | 12.32 | 15.43 | 12.40 | 15.53 | 12.48 |
| Voltage at Maximum Power (Vmp/V) | 33.28 | 31.63 | 33.40 | 31.74 | 33.51 | 31.85 | 33.62 | 31.95 | 33.73 | 32.06 |
| Current at Maximum Power (Imp/A) | 14.43 | 11.57 | 14.53 | 11.65 | 14.63 | 11.73 | 14.73 | 11.81 | 14.83 | 11.89 |
| Module Efficiency(%) | 23.5 | | 23.8 | | 24.0 | | 24.3 | | 24.5 | |

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 ± 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 |