

# Hi-MO X10 Scientist

## LR7-54HVD (Balkonkraftwerk) 500M

- Highest efficiency with the best energy generation performance
- N-type TaiRay wafer & HPBC2.0 & 0BB innovative structure
- Anti-Shading & Prevent Localized Overheating
- Longer product warranty, better service

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

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**



**24.3%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

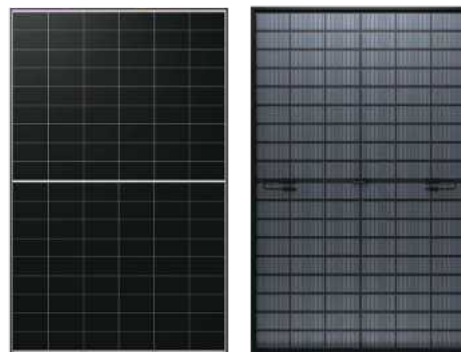
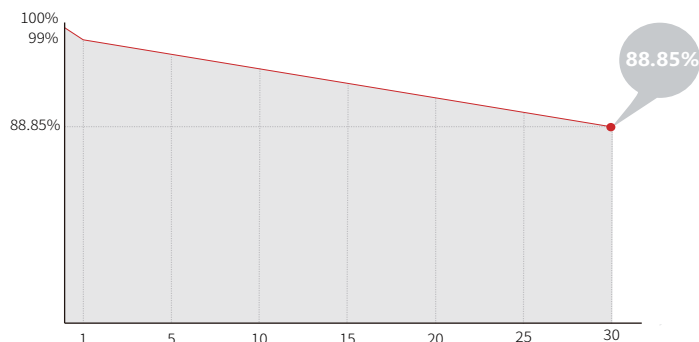
**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

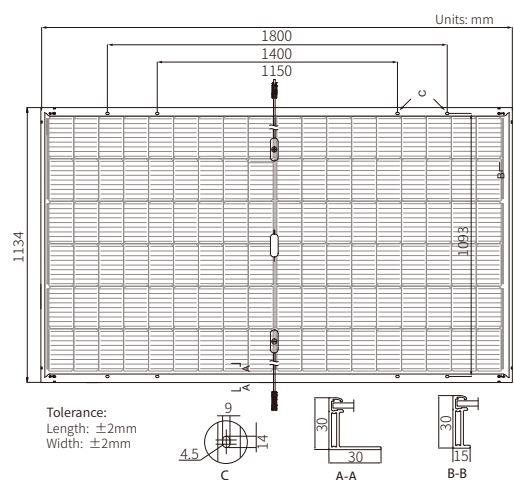
## Additional Value

### 30-Year Power Warranty



## Mechanical Parameters

|                  |                                                                       |
|------------------|-----------------------------------------------------------------------|
| Cell Orientation | 108 (6×18)                                                            |
| Junction Box     | IP68                                                                  |
| Output Cable     | 4mm <sup>2</sup> , +400, -200mm/±1200mm length can be customized      |
| Glass            | Double glass<br>2.0mm coated tempered glass+1.6mm semi-tempered glass |
| Frame            | Black anodized aluminum alloy frame                                   |
| Weight           | 23.5kg                                                                |
| 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: ±3%

| Module Type                      | LR7-54HVD-500M |       |
|----------------------------------|----------------|-------|
| Testing Condition                | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 500            | 381   |
| Open Circuit Voltage (Voc/V)     | 40.97          | 38.95 |
| Short Circuit Current (Isc/A)    | 15.38          | 12.35 |
| Voltage at Maximum Power (Vmp/V) | 33.95          | 32.27 |
| Current at Maximum Power (Imp/A) | 14.73          | 11.81 |
| Module Efficiency(%)             | 24.5           |       |

## Operating Parameters

|                                    |               |
|------------------------------------|---------------|
| Operational Temperature            | -40°C ~ +85°C |
| Power Output Tolerance             | 0 ~ 3%        |
| Maximum System Voltage             | DC1500V (IEC) |
| Maximum Series Fuse Rating         | 30A           |
| Nominal Operating Cell Temperature | 45±2°C        |
| Protection Class                   | Class II      |
| Bifaciality                        | 70±5%         |
| 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 |