

# 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

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## LR7-54HVH 475~490M

**24.0%**  
MAX MODULE  
EFFICIENCY

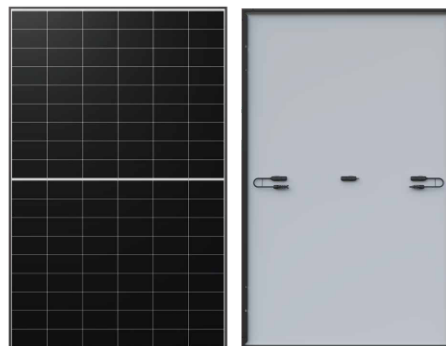
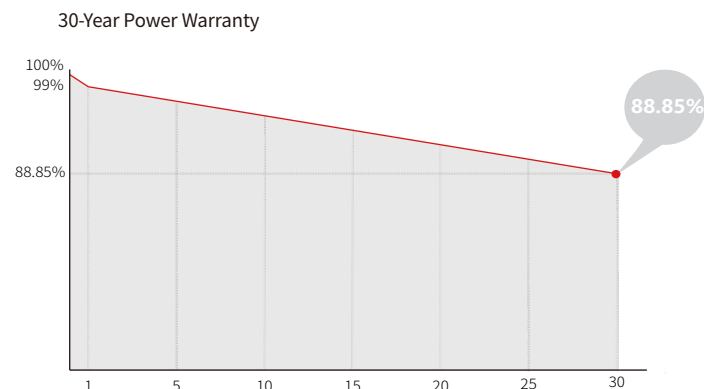
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

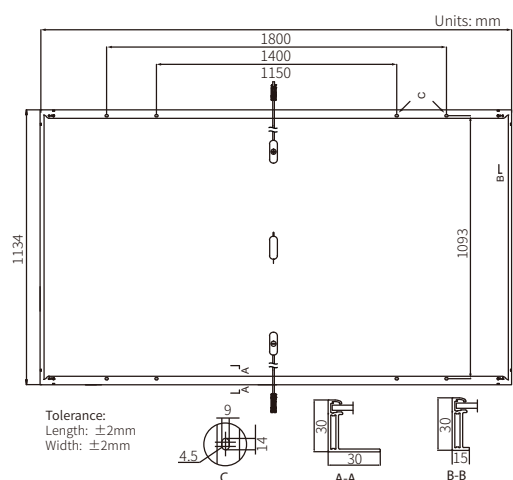
**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

### Additional Value



### Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm 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 P<sub>max</sub>: ±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 (P <sub>max</sub> /W)	475	362	480	365	485	369	490	373
Open Circuit Voltage (V <sub>oc</sub> /V)	40.18	38.18	40.29	38.29	40.40	38.39	40.52	38.51
Short Circuit Current (I <sub>sc</sub> /A)	15.03	12.08	15.13	12.16	15.23	12.24	15.33	12.32
Voltage at Maximum Power (V <sub>mp</sub> /V)	33.16	31.52	33.28	31.63	33.40	31.74	33.51	31.85
Current at Maximum Power (I <sub>mp</sub> /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±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 I <sub>sc</sub>	+0.050%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.200%/°C
Temperature Coefficient of P <sub>max</sub>	-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. (20241011 V01 Draft)