

# Hi-MO X10 Scientist

## LR7-54HVH 495~505M

- 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

25

25-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**



**24.7%**  
MAX MODULE  
EFFICIENCY

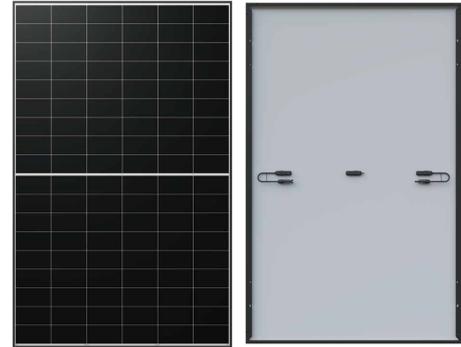
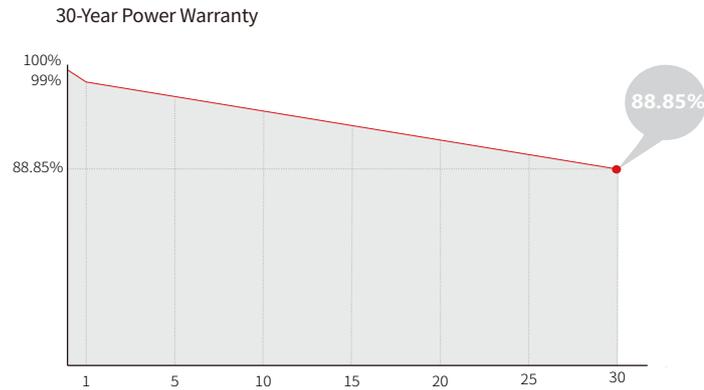
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

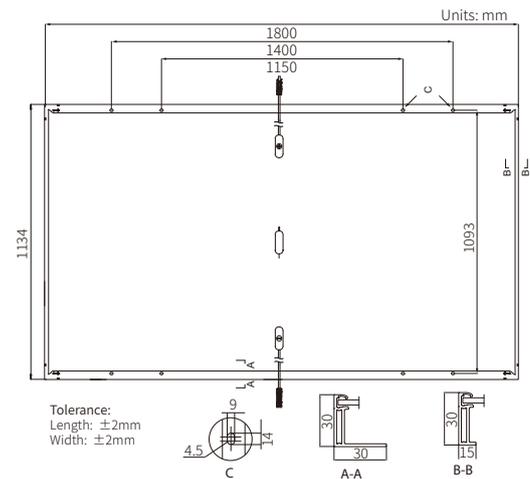
**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

## Additional Value



## Mechanical Parameters

Cell Orientation	108 (6 × 18)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±12.00mm 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: ±3%

Module Type	LR7-54HVH-495M		LR7-54HVH-500M		LR7-54HVH-505M	
	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	495	377	500	381	505	384
Open Circuit Voltage (Voc/V)	40.64	38.62	40.75	38.72	40.85	38.82
Short Circuit Current (Isc/A)	15.43	12.40	15.53	12.48	15.62	12.55
Voltage at Maximum Power (Vmp/V)	33.62	31.95	33.73	32.06	33.84	32.16
Current at Maximum Power (Imp/A)	14.73	11.81	14.83	11.89	14.93	11.96
Module Efficiency(%)	24.3		24.5		24.7	

## 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