

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

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



24.7%
MAX MODULE
EFFICIENCY

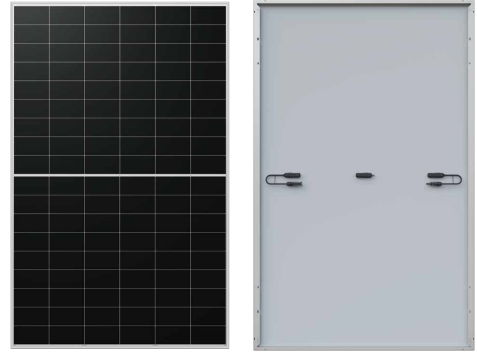
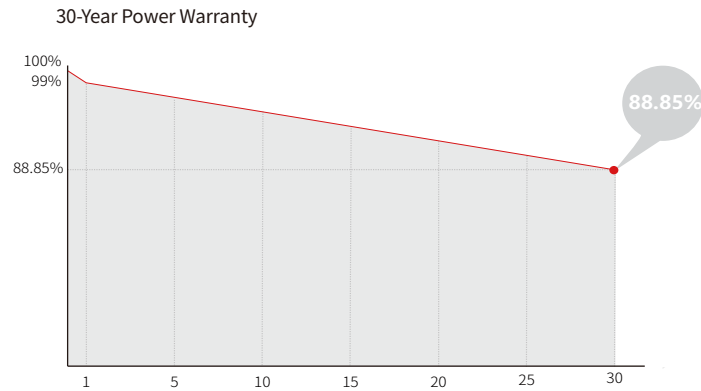
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

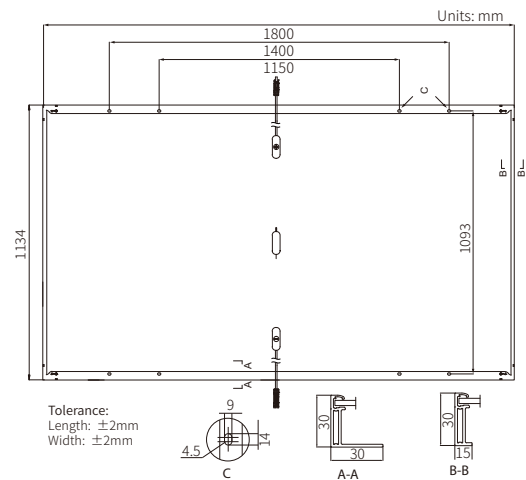
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

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

NOCT: AM1.5 800W/m² 20°C 1m/s

Test uncertainty for P_{max}: ±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 (P _{max} /W)	495	377	500	381	505	384
Open Circuit Voltage (V _{oc} /V)	40.64	38.62	40.75	38.72	40.85	38.82
Short Circuit Current (I _{sc} /A)	15.43	12.40	15.53	12.48	15.62	12.55
Voltage at Maximum Power (V _{mp} /V)	33.62	31.95	33.73	32.06	33.84	32.16
Current at Maximum Power (I _{mp} /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 I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C