

LONGi EcoLife

LR7-54HVH(Single Glass)

480~500M (245_{W/m²})

First Choice For High-End Residential

Extreme efficiency, 24.5%+

High Power Generation

Leading HPBC2.0 technology, more power generation under the same area

Safety Function

Anti-Shading and Prevent Localized Overheating

Low Carbon and Environmentally Friendly

Low carbon for the whole lifecycle process, more environmentally friendly

Higher Hail Resistance

3.2mm tempered glass on the front

Complete System and Product Certifications

IEC61215, IEC 61730

ISO9001: Quality Management System

ISO14001: Environment Management System

ISO45001: Occupational Health and Safety Management System

IEC62941: Quality System for PV Module Manufacturing

2

25-Year Warranty for Materials and Processing

5

30-Year Warranty for Extra Linear Power Output

3

0



Residential PV Modules, Choose BC

LR7-54HVH 480~500M

24.5%

0~3%

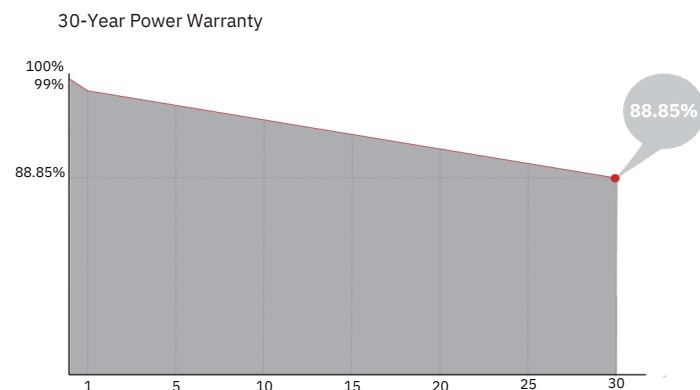
<1%

FIRST YEAR
POWER DEGRADATION

0.35%

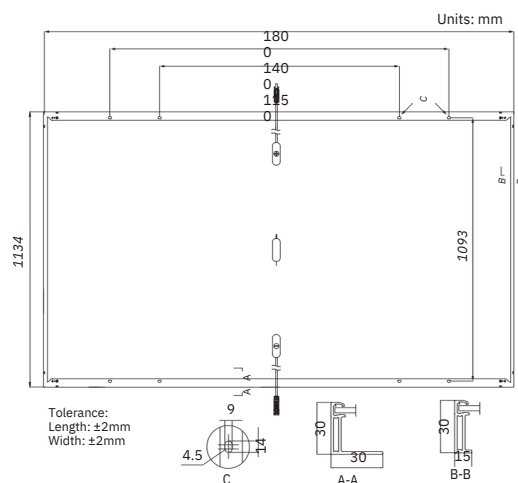
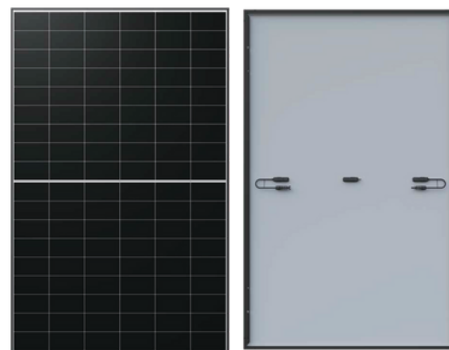
BC-CELL

Additional Value



Mechanical Parameters

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

NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for P_{max}±3%

Module Type	LR7-54HVH-480M		LR7-54HVH-485M		LR7-54HVH-490M		LR7-54HVH-495M		LR7-54HVH-500M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (P _{max} /W)	480	365	485	369	490	373	495	377	500	381
Open Circuit Voltage (V _{oc} /V)	40.29	38.29	40.40	38.39	40.52	38.51	40.64	38.62	40.75	38.72
Short Circuit Current (I _{sc} /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 (V _{mp} /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 (I _{mp} /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 I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C

LONGI

Specifications included in this datasheet are subject to change without notice.
LONGi reserves the right of final interpretation (North BU V01 20250423)