

LONGi EcoLife

LR7-54HJBB (Dual Glass)

490~505M (247_{W/m²})

First Choice For High-End Residential

- ▶ **Ultimate Efficiency, 24.7%+**
- ▶ **More Power Generation**
Exclusive HBC technology, higher power generation in all scenarios
- ▶ **Real Black Appearance**
No gridlines, consistent Black
- ▶ **Longer Module Life**
Butyl rubber seals for better water resistance
- ▶ **Enhanced Safety Function**
Optimized Anti-Shading and Prevent Localized Overheating
- ▶ **Higher Hurricanes and Snow Resistance**
Enhanced Mechanical Load: 6000Pa/3600Pa
- ▶ **Low Carbon and Environmentally Friendly**
Low carbon for the whole lifecycle, more environmentally friendly
- ▶ **Fire Rating A**
Obtain fire rating class A test report

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

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30-Year Warranty for Materials and Processing

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30-Year Warranty for Extra Linear Power Output



Residential PV Modules, Choose BC

LR7-54HJBB 490~505M

24.7%
MAX MODULE
EFFICIENCY

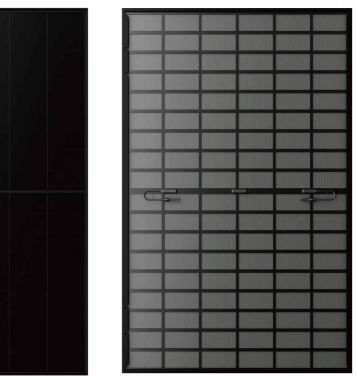
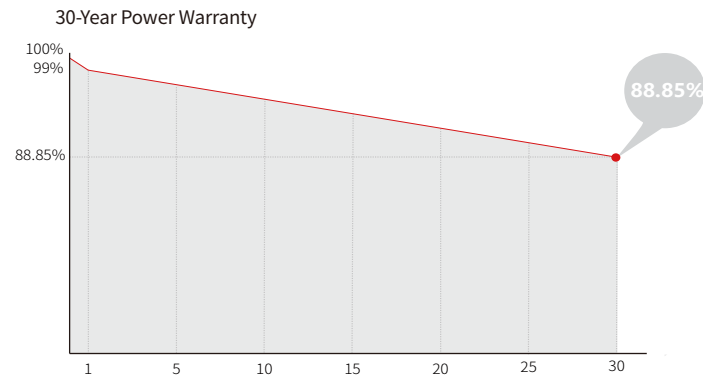
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

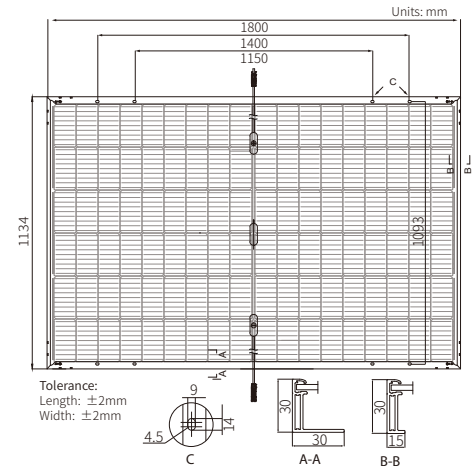
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , +400, -200mm/±1200mm length can be customized
Glass	Double glass 2.0mm semi-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/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	LR7-54HJBB-490M		LR7-54HJBB-495M		LR7-54HJBB-500M		LR7-54HJBB-505M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	490	373	495	377	500	380	505	384
Open Circuit Voltage (Voc/V)	41.25	39.21	41.35	39.30	41.45	39.40	41.55	39.49
Short Circuit Current (Isc/A)	15.04	12.07	15.15	12.16	15.26	12.25	15.37	12.34
Voltage at Maximum Power (Vmp/V)	34.07	32.37	34.17	32.46	34.27	32.56	34.37	32.65
Current at Maximum Power (Imp/A)	14.38	11.52	14.49	11.61	14.59	11.69	14.69	11.77
Module Efficiency(%)	24.0		24.3		24.5		24.7	

Electrical characteristics with different rear side power gain (reference to 500W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
525	41.45	16.02	34.27	15.32	5%
550	41.45	16.78	34.27	16.05	10%
575	41.55	17.54	34.37	16.73	15%
600	41.55	18.31	34.37	17.46	20%
625	41.55	19.07	34.37	18.19	25%

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
Fire Rating	IEC Class A

Mechanical Loading

Front Side Maximum Static Loading	6000Pa
Rear Side Maximum Static Loading	3600Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.210%/°C
Temperature Coefficient of Pmax	-0.240%/°C



Specifications included in this datasheet are subject to change without notice.
LONGI reserves the right of final interpretation. (BGV02 20250423)