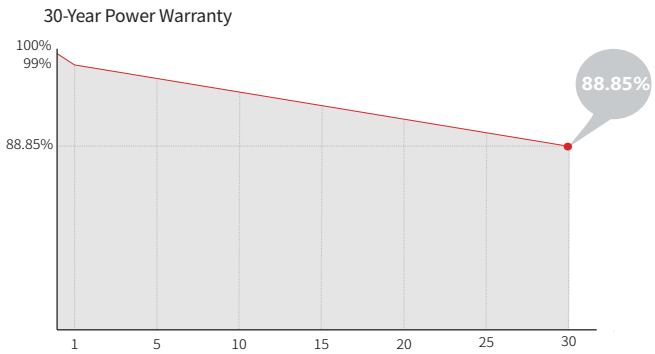

LONGi EcoLife
Define Roof Define Life
THE smarter AWARD
S10 Double Glass Premium Black
(LR7-54HJBB)
490~505M 247W/m²
Leading
Black Module
Efficiency
Efficiency
24.7%
70%
Output Maintained
when Shaded[1]
Anti
Shading
Highest
Fire Safety
Report[2]
Class A
Fire Rating
60°C+
Lower Temperature
under Shade[3]
Prevent
Overheating
High
Wind
Resistance
Loading
6000/3600Pa
TIER 1
Bloomberg
TÜV SÜD
CE
PV CYCLE
HPBC 2.0
30 YEAR
WARRANTY
Power | Product

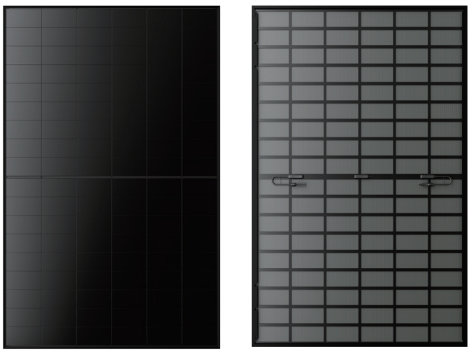
Define Roof Define Life

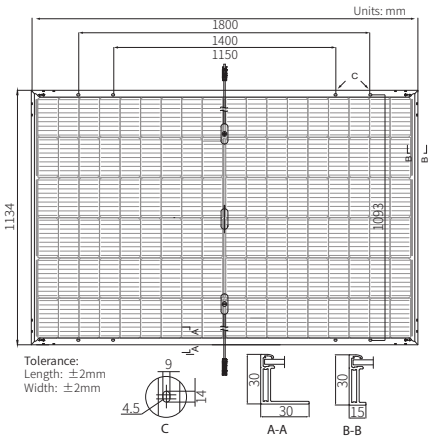
LR7-54HJBB 490~505M

24.7%	0~3%	<1%	0.35%	BC-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	LOWER OPERATING TEMPERATURE

Additional Value







Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm², +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

Test uncertainty for Pmax: ±3%

Module Type	LR7-54HJBB-490M	LR7-54HJBB-495M	LR7-54HJBB-500M	LR7-54HJBB-505M
Testing Condition	STC	STC	STC	STC
Maximum Power (Pmax/W)	490	495	500	505
Open Circuit Voltage (Voc/V)	41.25	41.35	41.45	41.55
Short Circuit Current (Isc/A)	15.04	15.15	15.26	15.37
Voltage at Maximum Power (Vmp/V)	34.07	34.17	34.27	34.37
Current at Maximum Power (Imp/A)	14.38	14.49	14.59	14.69
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

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

LONGi

1. Data source:Test of single-cell shading in LONGi internal Lab. Anti-shading effect vary due to differences in test irradiation conditions, temperature, software, etc.
2. This product has obtained Class A fire test report. Due to various test factors, consistent results in every test cannot be guaranteed; actual test results prevail.
3. Data source: Comparison of test temperatures between EcoLife modules and conventional modules based on IEC 61215 Hot-spot endurance test (WBT) - MQT 09. Test data vary due to differences in the tested modules and institution.

Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (BGV02 20250820)