LONGi EcoLife

Define Roof Define Life

THE smarter E AWARD

S10 Double Glass
(LR7-54HJD)

495~510M 250W/m²

Leading
Module Efficiency

Efficiency 25.0%

70%
Output Maintained when Shaded[1]

Anti Shading

High
Wind Resistance

Loading 6000/3600Pa

60°C+
Lower Temperature under Shade[2]

Prevent Overheating



TIER 1 Bloomberg NEW ENERGY FINANCE

TÜV SÜD

CE

PV CYCLE

HIBC

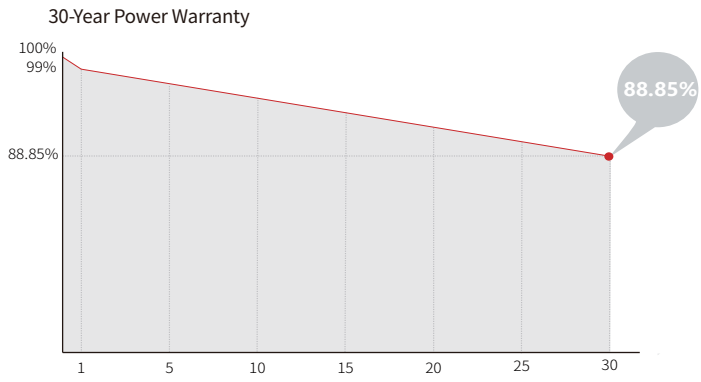
30 YEAR WARRANTY Power | Product

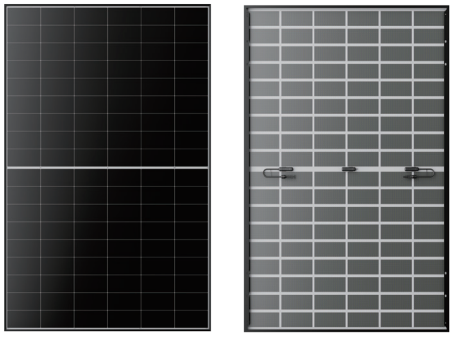
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LR7-54HJD 495~510M

25.0%	0~3%	<1%	0.35%	BC-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	LOWER OPERATING TEMPERATURE

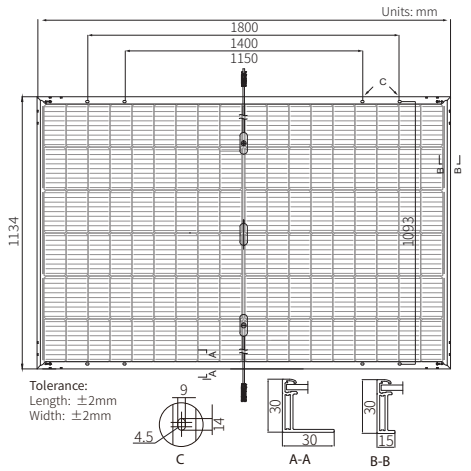
Additional Value





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	LR7-54HJD-495M	LR7-54HJD-500M	LR7-54HJD-505M	LR7-54HJD-510M
Testing Condition	STC	STC	STC	STC
Maximum Power (Pmax/W)	495	500	505	510
Open Circuit Voltage (Voc/V)	41.25	41.35	41.45	41.55
Short Circuit Current (Isc/A)	15.19	15.30	15.41	15.52
Voltage at Maximum Power (Vmp/V)	34.07	34.17	34.27	34.37
Current at Maximum Power (Imp/A)	14.53	14.63	14.74	14.84
Module Efficiency(%)	24.3	24.5	24.7	25.0

Electrical characteristics with different rear side power gain (reference to 505W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
530	41.45	16.18	34.27	15.47	5%
556	41.45	16.95	34.27	16.21	10%
581	41.55	17.72	34.37	16.90	15%
606	41.55	18.49	34.37	17.63	20%
631	41.55	19.26	34.37	18.37	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 C

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. 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 20250905)