

LONGi EcoLife

Define Roof Define Life



X10 Single Glass Premium Black
(LR7-54HVB)

465~495M 243W/m²



Leading
Black Module
Efficiency

Efficiency
24.3%



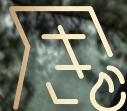
70%
Output Maintained
when Shaded¹

Anti
Shading



HW4
Hail
Resistance²

3.2mm
Tempered Glass



60°C
Lower Temperature
under Shade³

Prevent
Overheating



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LR7-54HVB 465~495M

24.3%
MAX MODULE
EFFICIENCY

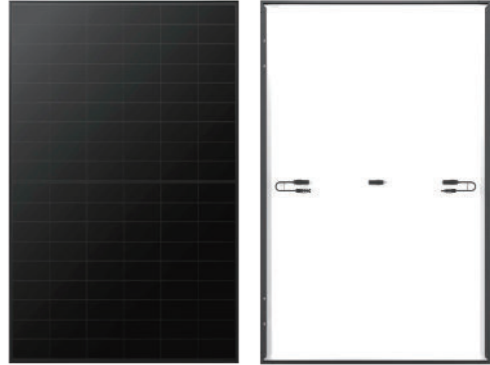
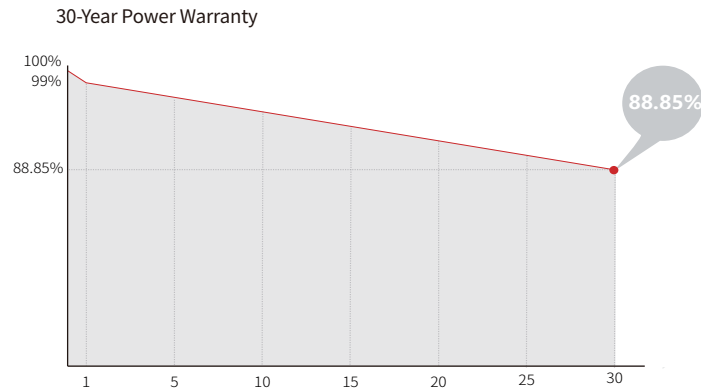
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

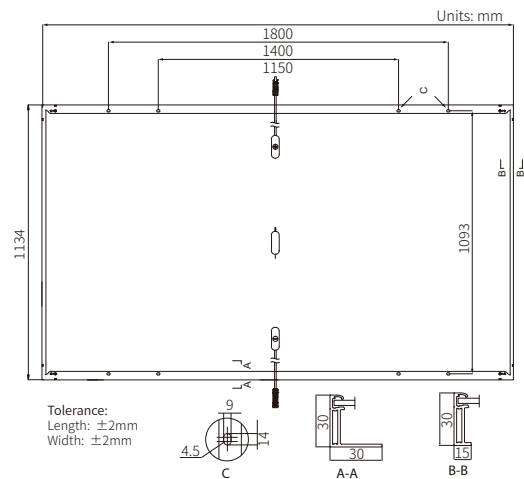
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , +400, -200mm/±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Black 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

Test uncertainty for Pmax: ±3%

Module Type	LR7-54HVB-465M	LR7-54HVB-470M	LR7-54HVB-475M	LR7-54HVB-480M	LR7-54HVB-485M	LR7-54HVB-490M	LR7-54HVB-495M
Testing Condition	STC	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	465	470	475	480	485	490	495
Open Circuit Voltage (Voc/V)	39.96	40.07	40.18	40.29	40.40	40.52	40.64
Short Circuit Current (Isc/A)	14.83	14.93	15.03	15.13	15.23	15.33	15.43
Voltage at Maximum Power (Vmp/V)	32.93	33.05	33.16	33.28	33.40	33.51	33.62
Current at Maximum Power (Imp/A)	14.13	14.23	14.33	14.43	14.53	14.63	14.73
Module Efficiency(%)	22.8	23.0	23.3	23.5	23.8	24.0	24.3

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
Hail Class	HW4 ²

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C



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 Swiss Hail VWF HW4 certification (Reference diameter of ice balls-VWF 40mm). 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.