

# LONGi EcoLife

Define Roof Define Life



X10 Single Glass Premium Black  
(LR7-54HVB)

475~495M 243<sub>W/m<sup>2</sup></sub>



**Leading**  
Black Module  
Efficiency

Efficiency  
24.3%



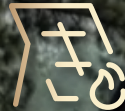
Anti  
Shading

**70%**  
Output Maintained  
when Shaded<sup>1</sup>



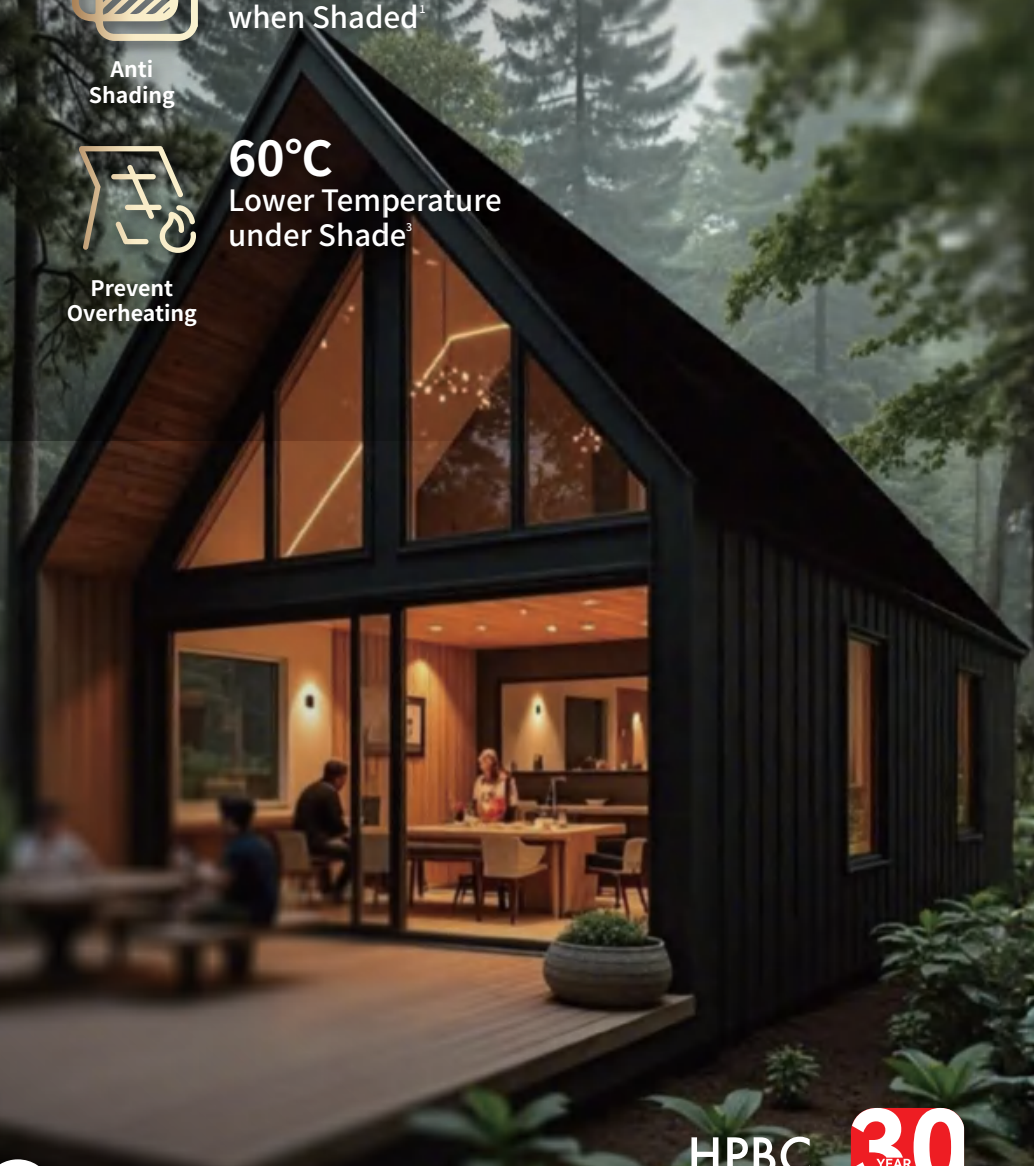
**HW4**  
Hail  
Resistance<sup>2</sup>

3.2mm  
Tempered Glass



Prevent  
Overheating

**60°C**  
Lower Temperature  
under Shade<sup>3</sup>



**24.3%**  
MAX MODULE  
EFFICIENCY

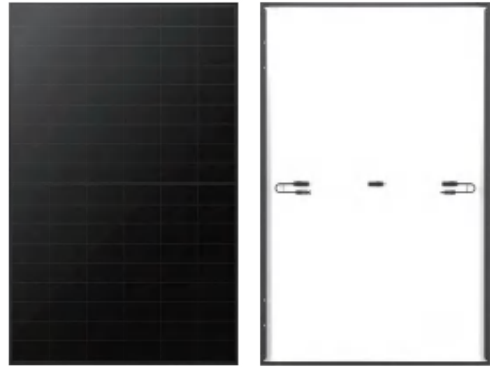
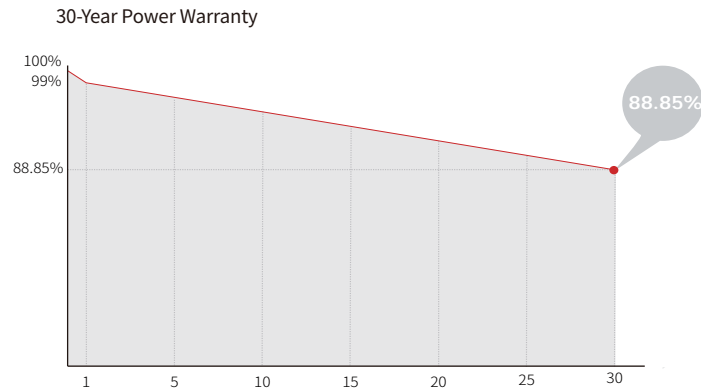
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

**0.35%**  
YEAR 2-30  
POWER DEGRADATION

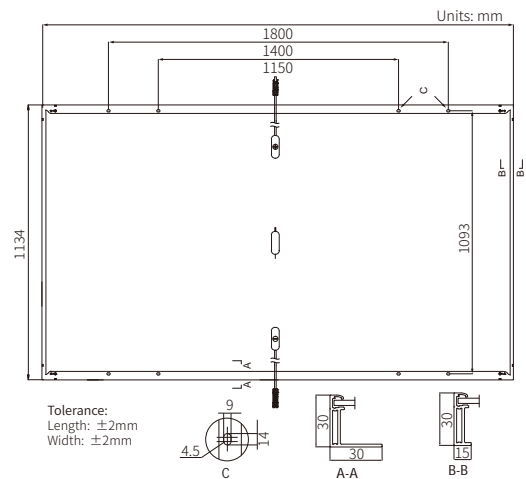
**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

**Additional Value**



**Mechanical Parameters**

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , +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/m<sup>2</sup> 25°C Test uncertainty for Pmax: ±3%

Module Type	LR7-54HVB-475M	LR7-54HVB-480M	LR7-54HVB-485M	LR7-54HVB-490M	LR7-54HVB-495M
Testing Condition	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	475	480	485	490	495
Open Circuit Voltage (Voc/V)	40.18	40.29	40.40	40.52	40.64
Short Circuit Current (Isc/A)	15.03	15.13	15.23	15.33	15.43
Voltage at Maximum Power (Vmp/V)	33.16	33.28	33.40	33.51	33.62
Current at Maximum Power (Imp/A)	14.33	14.43	14.53	14.63	14.73
Module Efficiency(%)	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 <sup>2</sup>

**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.