

LONGi EcoLife

Define Roof Define Life

THE **smarter**
AWARD 

X10 Single Glass Premium Black
(LR7-54HVB)

475~495M 243W/m²



Leading
Black Module
Efficiency

Efficiency
24.3%



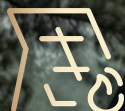
Anti
Shading

70%
Output Maintained
when Shaded¹



HW4
Hail
Resistance²

3.2mm
Tempered Glass



Prevent
Overheating

60°C
Lower Temperature
under Shade³



24.3%
MAX MODULE
EFFICIENCY

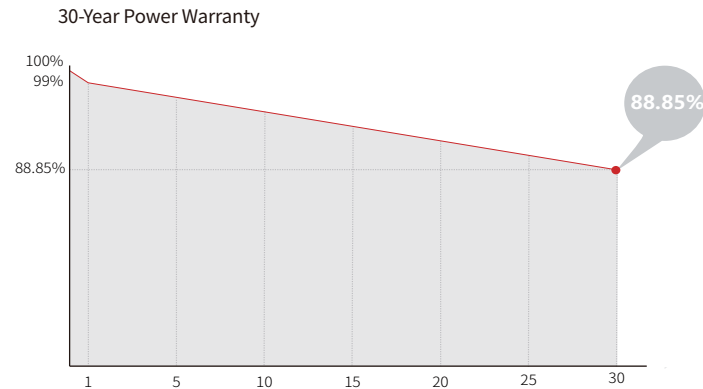
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

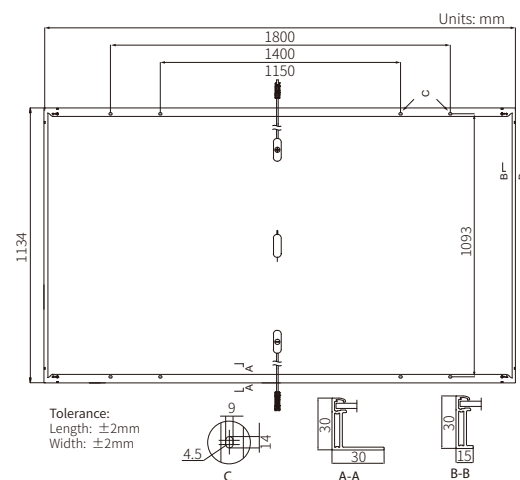
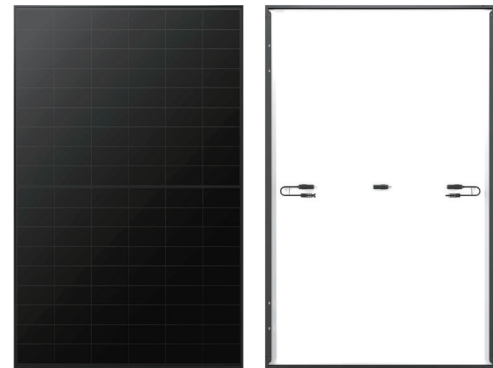
BC-CELL
LOWER OPERATING
TEMPERATURE

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 P_{max}: ±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 (P _{max} /W)	475	480	485	490	495
Open Circuit Voltage (V _{oc} /V)	40.18	40.29	40.40	40.52	40.64
Short Circuit Current (I _{sc} /A)	15.03	15.13	15.23	15.33	15.43
Voltage at Maximum Power (V _{mp} /V)	33.16	33.28	33.40	33.51	33.62
Current at Maximum Power (I _{mp} /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 ²

Temperature Ratings (STC)

Temperature Coefficient of I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C