

LONGi EcoLife

Define Roof Define Life

THE SMARTER
AWARD

X10 Double Glass Premium Black
(LR7-54HVBB)

470~485M 238_{W/m²}



Efficiency
23.8%

Leading
Black Module
Efficiency



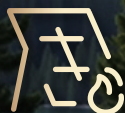
Anti
Shading

70%
Output Maintained
when Shaded¹



POE Film

High
Corrosion
Resistance



Prevent
Overheating

60°C
Lower Temperature
under Shade²



23.8%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

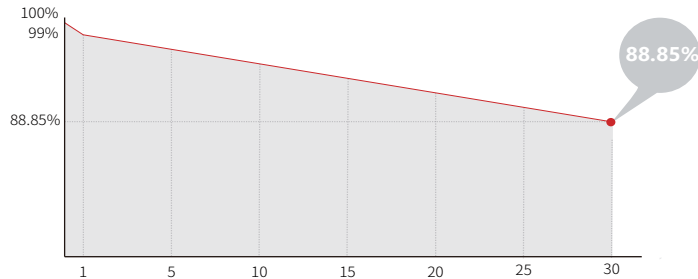
<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

BC-CELL
LOWER OPERATING
TEMPERATURE

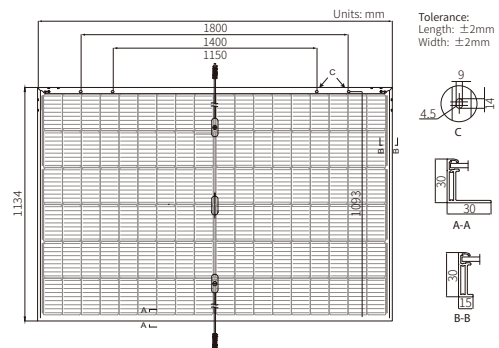
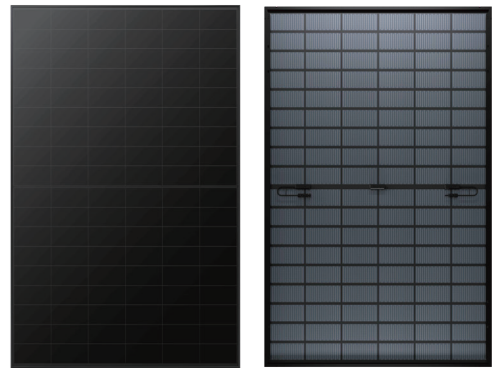
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , +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	LR7-54HVBB-470M	LR7-54HVBB-475M	LR7-54HVBB-480M	LR7-54HVBB-485M
Testing Condition	STC	STC	STC	STC
Maximum Power (Pmax/W)	470	475	480	485
Open Circuit Voltage (Voc/V)	40.31	40.42	40.53	40.64
Short Circuit Current (Isc/A)	14.78	14.88	14.98	15.08
Voltage at Maximum Power (Vmp/V)	33.29	33.40	33.51	33.62
Current at Maximum Power (Imp/A)	14.13	14.23	14.33	14.43
Module Efficiency(%)	23.0	23.3	23.5	23.8

Electrical characteristics with different rear side power gain (reference to 470W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
494	40.31	15.52	33.29	14.82	5%
517	40.31	16.26	33.29	15.53	10%
541	40.41	17.00	33.39	16.19	15%
564	40.41	17.74	33.39	16.89	20%
588	40.41	18.48	33.39	17.60	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	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

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