

# LONGi EcoLife

LR7-54HVBB

470~485M (238  $W/m^2$ )



**Leading**  
Black Module  
Efficiency

High  
Efficiency



**70%**  
Output Maintained  
when Shaded

Anti  
Shading



**High**  
Corrosion  
Resistance

POE Film



**60°C+**  
Lower Temperature  
under Shade

Prevent  
Overheating



**23.8%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

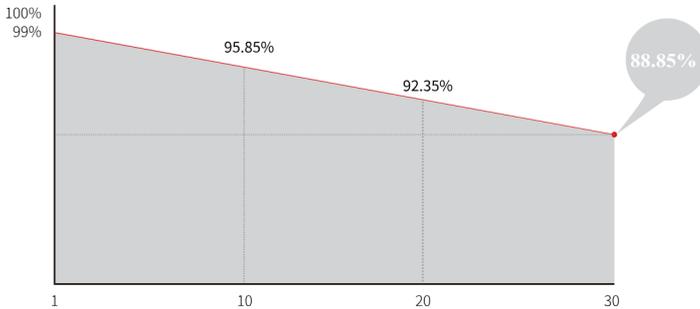
**1%**  
FIRST YEAR  
POWER DEGRADATION

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

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

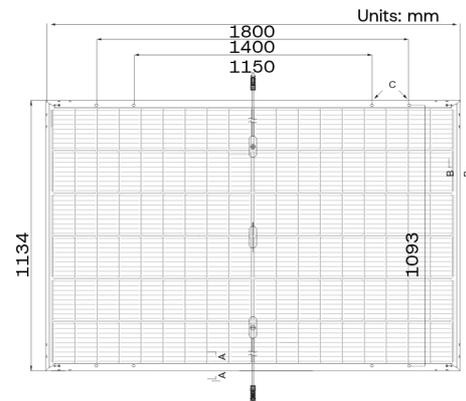
## Additional Value

### 30 Year Power Warranty

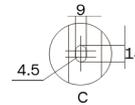


## Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , +400, -200mm/±12 00mm length can be customized
Glass	Dual glass, 2.0mm coated tempered glass+1.6mm semi-tempered glass
Frame	Black anodized aluminum alloy frame
Weight	23.5
Dimension	1800×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 864pcs per 40' HC



**Tolerance:**  
Length: ±2mm  
Width: ±2mm



## Electrical Characteristics

STC : AM1.5 1000W/m<sup>2</sup> 25°C

NOCT : AM1.5 800W/m<sup>2</sup> 20°C 1m/s

Test uncertainty for P<sub>max</sub> ±3%

Module Type	LR7-54HVBB-470M	LR7-54HVBB-475M	LR7-54HVBB-480M	LR7-54HVBB-485M
Testing Condition	STC	STC	STC	STC
Maximum Power (P <sub>max</sub> /W)	470.0	475.0	480.0	485.0
Open Circuit Voltage (V <sub>oc</sub> /V)	40.31	40.42	40.53	40.64
Short Circuit Current (I <sub>sc</sub> /A)	14.78	14.88	14.98	15.08
Voltage at Maximum Power (V <sub>mp</sub> /V)	33.29	33.4	33.51	33.62
Current at Maximum Power (I <sub>mp</sub> /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

P <sub>max</sub> /W	V <sub>oc</sub> /V	I <sub>sc</sub> /A	V <sub>mp</sub> /V	I <sub>mp</sub> /A	P <sub>max</sub> gain
494.0	40.31	15.52	33.29	14.82	0.05
517.0	40.31	16.26	33.29	15.53	0.1
541.0	40.41	17.0	33.39	16.19	0.15
564.0	40.41	17.74	33.39	16.89	0.2
588.0	40.41	18.48	33.39	17.6	0.25

## 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
Hailstone Test	25mm Hailstone at the speed of 23m/s

## Temperature Ratings (STC)

Temperature Coefficient of I <sub>sc</sub>	+0.050%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.260%/°C
Temperature Coefficient of P <sub>max</sub>	-0.200%/°C