

# LONGi EcoLife

## LR7-54HVBB(Dual Glass)

# 460~465M

### First Choice For High-End Residential

#### ▶ Extreme Efficiency

#### ▶ High Power Generation

Leading HPBC2.0 technology, more power generation under the same area

#### ▶ Low Carbon and Environmentally Friendly

Low carbon for the whole lifecycle process, more environmentally friendly

#### ▶ Safety Function

Anti-Shading and Prevent Localized Overheating

#### ▶ Pure Black Appearance

No gridlines, low glare

#### Complete System and Product Certifications

IEC61215, IEC 61730

ISO9001: Quality Management System

ISO14001: Environment Management System

ISO45001: Occupational Health and Safety Management System

IEC62941: Quality System for PV Module Manufacturing

**30** 30-Year Warranty for Materials and Processing

**30** 30-Year Warranty for Extra Linear Power Output



# Residential PV Modules, Choose BC

# LR7-54HVBB 460~465M

**22.8%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

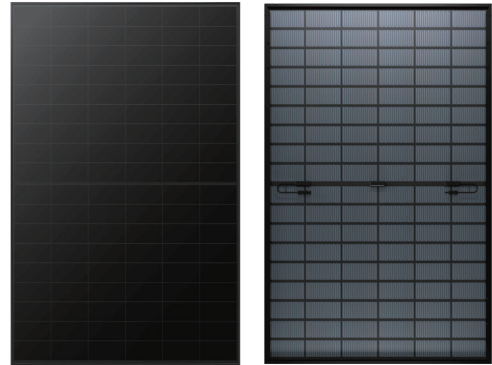
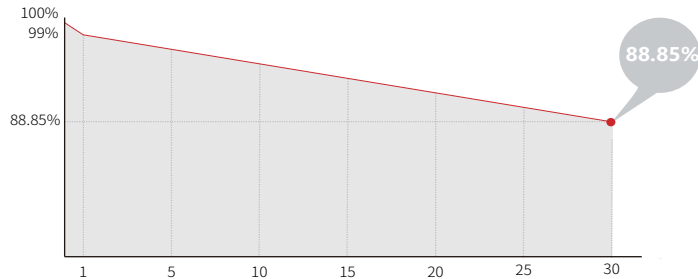
**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

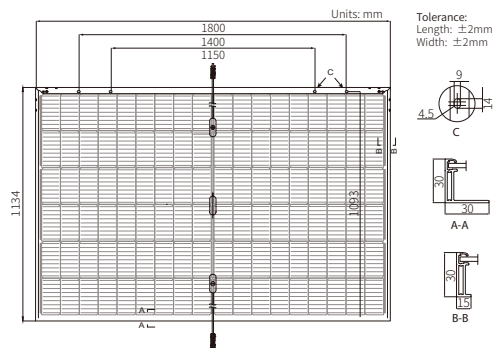
## Additional Value

### 30-Year Power Warranty



## Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , +400, -200mm/±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/m<sup>2</sup> 25°C NOCT : AM1.5 800W/m<sup>2</sup> 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR7-54HVBB-460M		LR7-54HVBB-465M	
	STC	NOCT	STC	NOCT
Testing Condition				
Maximum Power (Pmax/W)	460	349	465	353
Open Circuit Voltage (Voc/V)	40.09	38.06	40.20	38.17
Short Circuit Current (Isc/A)	14.58	11.66	14.68	11.75
Voltage at Maximum Power (Vmp/V)	33.07	31.38	33.18	31.49
Current at Maximum Power (Imp/A)	13.91	11.12	14.02	11.21
Module Efficiency(%)	22.5		22.8	

## 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



Specifications included in this datasheet are subject to change without notice. LONGI reserves the right of final interpretation. (BGV02 20250604)