

LONGi EcoLife

LR7-54HVD(Dual Glass)

475~495M (24.3_{W/m²})

First Choice For High-End Residential

▶ **Extreme Efficiency, 24.3%+**

▶ **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

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

15 15-Year Warranty for Materials and Processing

30 30-Year Warranty for Extra Linear Power Output



Residential PV Modules, Choose BC

LR7-54HVD 475~495M

24.3%
MAX MODULE
EFFICIENCY

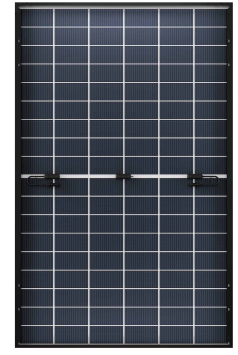
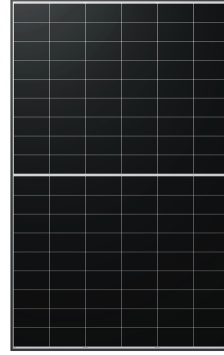
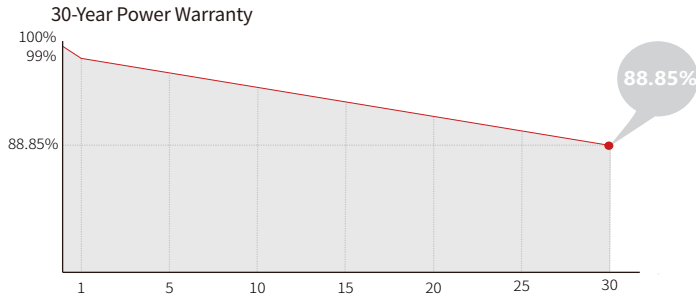
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

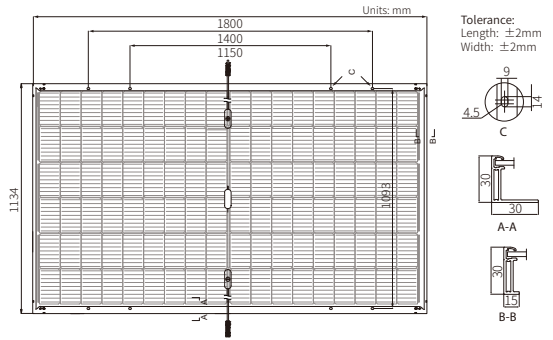
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , +400, -200mm/±1200mm length can be customized
Glass	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 NOCT : AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR7-54HVD-475M		LR7-54HVD-480M		LR7-54HVD-485M		LR7-54HVD-490M		LR7-54HVD-495M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	475	361	480	365	485	369	490	373	495	377
Open Circuit Voltage (Voc/V)	40.42	38.39	40.53	38.50	40.64	38.61	40.75	38.73	40.86	38.84
Short Circuit Current (Isc/A)	14.88	11.93	14.98	12.02	15.08	12.10	15.18	12.19	15.28	12.27
Voltage at Maximum Power (Vmp/V)	33.40	31.71	33.51	31.82	33.62	31.93	33.73	32.05	33.84	32.16
Current at Maximum Power (Imp/A)	14.23	11.39	14.33	11.48	14.43	11.56	14.53	11.65	14.63	11.73
Module Efficiency(%)	23.3		23.5		23.8		24.0		24.3	

Electrical characteristics with different rear side power gain (reference to 480W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
504	40.53	15.73	33.51	15.04	5%
528	40.53	16.48	33.51	15.76	10%
552	40.63	17.23	33.61	16.42	15%
576	40.63	17.98	33.61	17.14	20%
600	40.63	18.73	33.61	17.85	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
Bifaciality	70±5%
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 20250427)