

# Hi-MO 7

## LR7-54HGBB

# 440~460M

- Suitable for the Distribution Market
- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance

**25** 25-year Warranty for Materials and Processing

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

### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

# LONGi



**22.5%**  
MAX MODULE  
EFFICIENCY

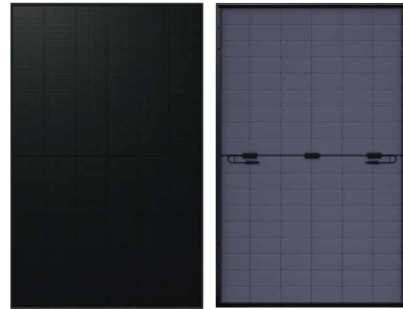
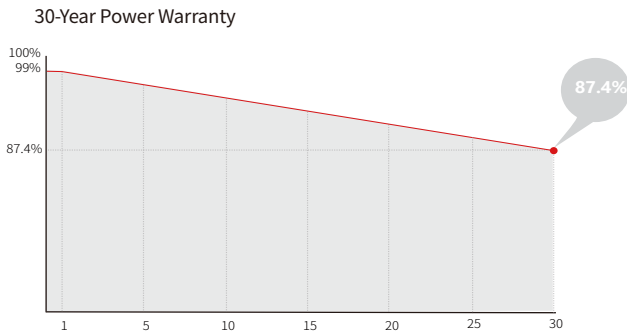
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

**0.4%**  
YEAR 2-30  
POWER DEGRADATION

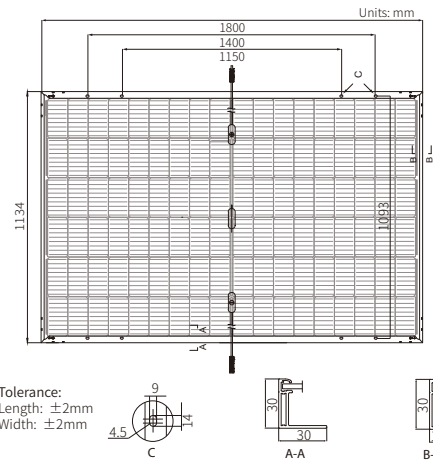
**HALF-CELL**  
Lower operating temperature

## Additional Value



## Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+1.6mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	23.6kg
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%

Modul Type	LR7-54HGBB-440M		LR7-54HGBB-445M		LR7-54HGBB-450M		LR7-54HGBB-455M		LR7-54HGBB-460M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	440	334.9	445	338.8	450	342.6	455	346	460	350
Open Circuit Voltage(Voc/V)	39.30	37.35	39.50	37.54	39.70	37.73	39.90	37.92	40.10	38.11
Short Circuit Current (Isc/A)	14.23	11.43	14.30	11.49	14.37	11.54	14.45	11.61	14.52	11.66
Voltage at Maximum Power (Vmp/V)	32.82	31.19	33.02	31.38	33.22	31.58	33.42	31.76	33.63	31.96
Current at Maximum Power (Imp/A)	13.41	31.19	13.48	10.80	13.55	10.85	13.62	10.91	13.68	10.96
Module Efficiency (%)	21.6		21.8		22.0		22.3		22.5	

## Electrical characteristics with different rear side power gain (reference to 450W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
473	39.70	15.09	33.22	14.22	5%
495	39.70	15.81	33.22	14.90	10%
518	39.80	16.53	33.32	15.58	15%
540	39.80	17.25	33.32	16.26	20%
563	39.80	17.96	33.32	16.93	25%

## Operating Parameters

Operational Temperature	-40°C ~ +85°C
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	80±10%
Fire Rating	UL Type 38 IEC Class C

## Mechanical Loading

Front Side Maximum Static Loading (e.g. snow, wind)	5400Pa
Rear Side Maximum Static Loading (e.g. wind)	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

## Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C