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

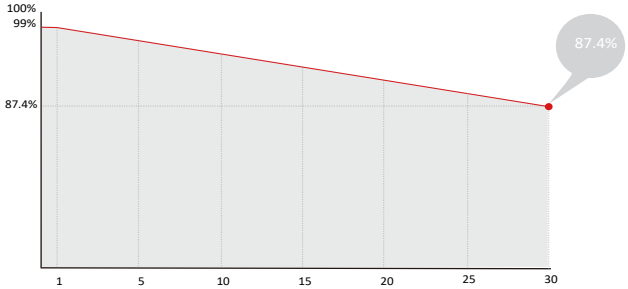
Hi-MO 7

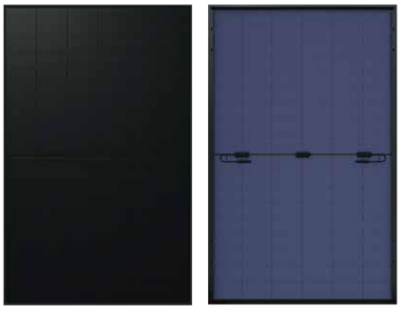
LR7-54HGBB 440~460M

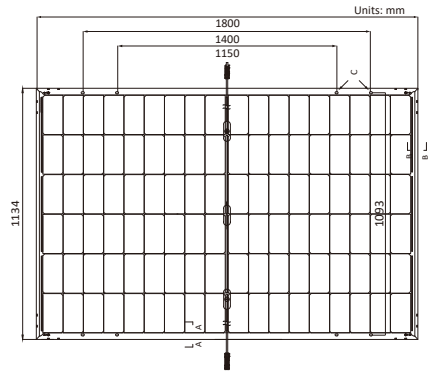
22.5%	0~3%	<1%	0.4%	HALF-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	Lower operating temperature

Additional Value

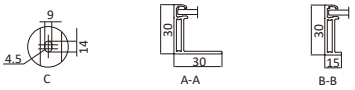
30-Year Power Warranty







Tolerance:
Length: ±2mm
Width: ±2mm



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm², +400, -200mm/±1200mm 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 / 846pcs per 40'HC

Electrical Characteristics

STC : AM1.5 1000W/m² 25℃ NOCT : AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax: ±3%

Modul Type	LR7-54HGBB-440M		LR7-54HGBB-445M		LR7-54HGBB-450M		LR7-54HGBB-455M		LR7-54HGBB-460M	
Testing Condition	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	10.74	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℃ ~ +85℃
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2℃
Protection Class	Class II
Bifaciality	ϕPmax：80±10%
	ϕVoc：98±5%
	ϕIsc：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%/℃
Temperature Coefficient of Voc	-0.230%/℃
Temperature Coefficient of Pmax	-0.280%/℃

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Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation.
（20241001）DG