

Hi-MO 7

LR8-54HGBB All Black

495~510W

N-type HPDC High Efficiency Bifacial Dual Glass Module

For
Canadian Market



Advanced HPDC cell technology delivers superior module efficiency up to 22.9%



Lower temperature coefficient of P_{max} : $-0.28\% / ^\circ\text{C}$, more power production at higher ambient temperatures



Anti-LID, anti-LeTID, and anti-PID with low power degradation



Excellent low irradiance performance



Weather resistant and certified to withstand rain, hail, wind, and snow



LONGi Lifecycle Quality ensures high product quality and long-term performance



Warranty for
Extra Linear Power Output



Warranty for
Materials and Processing

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

22.9%
MAX MODULE
EFFICIENCY

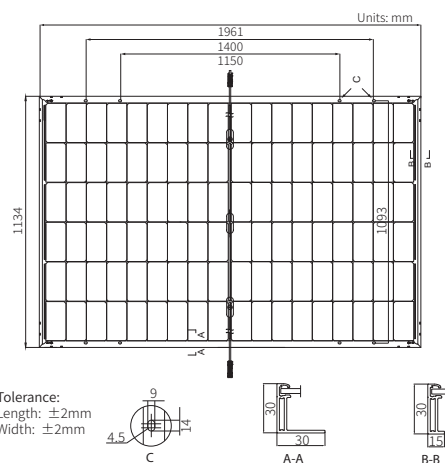
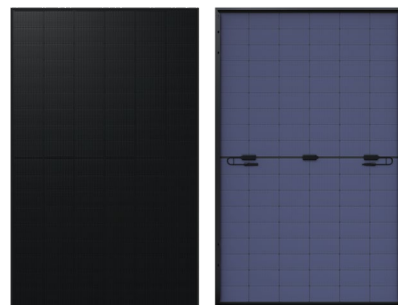
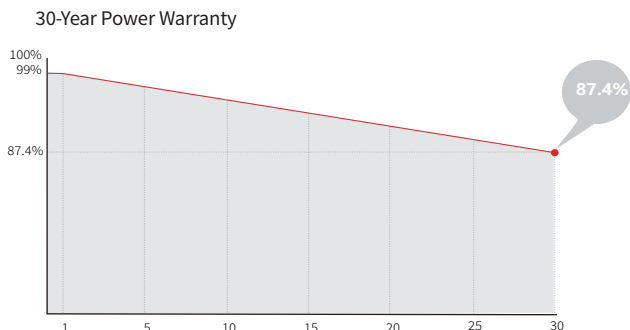
0~3%
POWER
TOLERANCE

<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 ² , +400, -200mm/±1200mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	28kg
Dimension	1961×1134×30mm
Packaging	36pcs per pallet / 180pcs 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: $\pm 3\%$

Modul Type	LR8-54HGBB-495W		LR8-54HGBB-500W		LR8-54HGBB-505W		LR8-54HGBB-510W	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Max Power(Pmax/W)	495	377	500	380	505	383	510	386
Open Circuit Voltage(Voc/V)	39.42	37.47	39.58	37.62	39.75	37.78	39.91	37.93
Short Circuit Current (Isc/A)	15.90	12.77	15.95	12.81	16.00	12.85	16.05	12.89
Voltage at Maximum Power (Vmp/V)	32.98	31.34	33.14	31.49	33.31	31.65	33.47	31.80
Current at Maximum Power (Imp/A)	15.01	12.02	15.09	12.06	15.16	12.10	15.24	12.14
Module Efficiency (%)	22.3		22.5		22.7		22.9	

Electrical characteristics with different rear side power gain (reference to 500W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
525	39.58	16.75	33.14	15.84	5%
550	39.58	17.54	33.14	16.59	10%
575	39.68	18.34	33.24	17.30	15%
600	39.68	19.14	33.24	18.05	20%
625	39.68	19.93	33.24	18.80	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	$\phi P_{\text{max}}: 80 \pm 10\%$
	$\phi V_{\text{oc}}: 98 \pm 5\%$
	$\phi I_{\text{sc}}: 80 \pm 10\%$
Fire Rating	UL Type 29
	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