

# Hi-MO 7 Preliminary

## LR8-48HGD 430~455M

- 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

12

12-year Warranty for  
Materials and Processing

30

30-year Warranty for Extra  
Linear Power Output

### Complete System and Product Certifications

IEC 61215, IEC 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



**22.8%**  
MAX MODULE  
EFFICIENCY

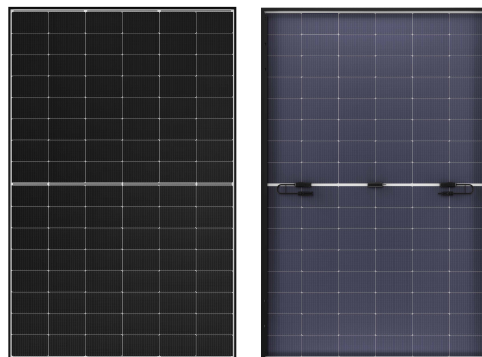
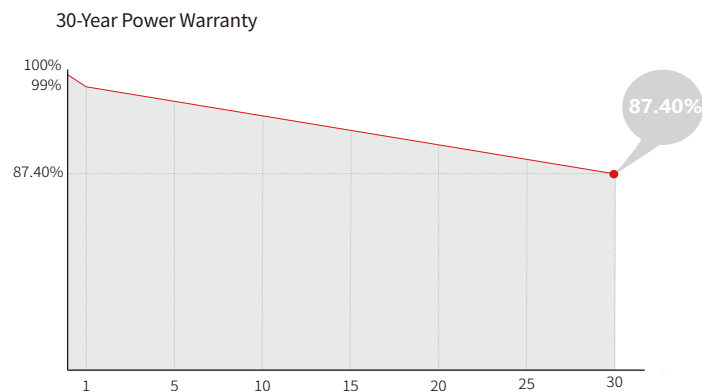
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

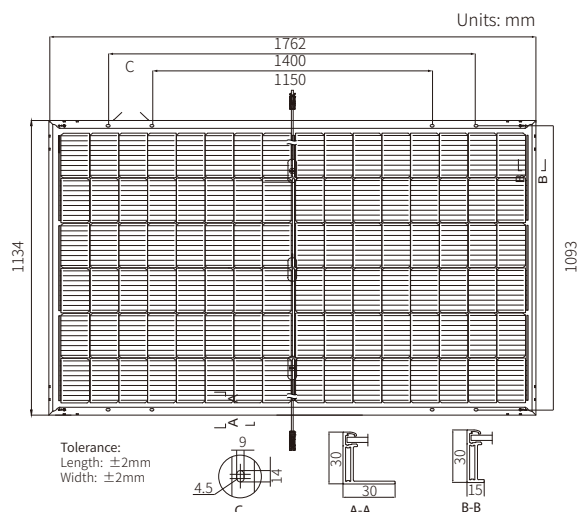
**HALF-CELL**  
LOWER OPERATING  
TEMPERATURE

## Additional Value



## Mechanical Parameters

Cell Orientation	96 (6×16)
Junction Box	IP68, three diodes
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	23.0kg
Dimension	1762×1134×30mm
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	LR8-48HGD-430M		LR8-48HGD-435M		LR8-48HGD-440M		LR8-48HGD-445M		LR8-48HGD-450M		LR8-48HGD-455M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	327.30	435	331.10	440	334.90	445	338.80	450	342.60	455	346.40
Open Circuit Voltage (Voc/V)	34.56	32.84	34.70	32.98	34.84	33.11	34.98	32.24	35.12	33.38	35.26	33.51
Short Circuit Current (Isc/A)	15.81	12.70	15.91	12.78	16.01	12.86	16.11	12.94	16.21	13.02	16.30	13.09
Voltage at Maximum Power (Vmp/V)	28.47	27.06	28.61	27.19	28.75	27.32	28.89	27.46	29.03	27.59	29.17	27.72
Current at Maximum Power (Imp/A)	15.11	12.10	15.21	12.18	15.31	12.26	15.41	12.34	15.51	12.42	15.60	12.50
Module Efficiency(%)	21.5		21.8		22.0		22.3		22.5		22.8	

## Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	35A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifacial Rate	80±5%
Fire Rating	UL Type 38 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	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C