

Hi-MO 7

Preliminary

LR8-48HGD 430~455M

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, 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



22.8%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

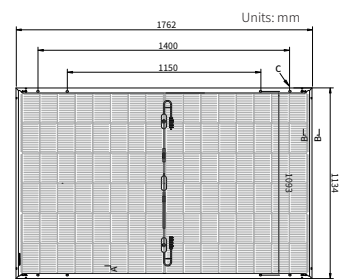
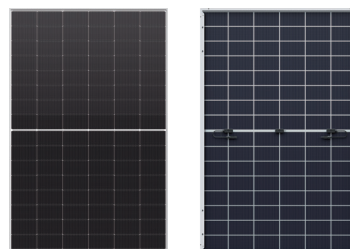
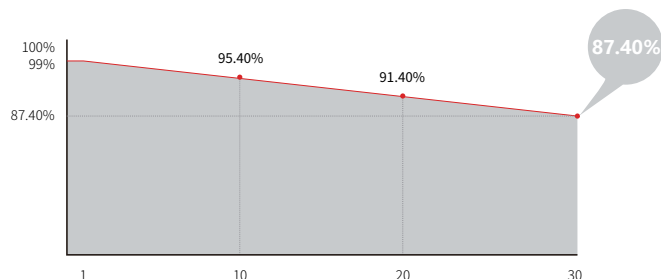
<1%
FIRST YEAR
POWER DEGRADATION

0.4%
YEAR 2-30
POWER DEGRADATION

HALF-CELL
Lower operating temperature

Additional Value

30-Year Power Warranty



Tolerance:
Length: $\pm 2\text{mm}$
Width: $\pm 2\text{mm}$



Mechanical Parameters

Cell Orientation	96 (6×16)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +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/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1.0 m/s

Test uncertainty for Pmax: $\pm 3\%$

Module Type	LR8-48HGD-430M		LR8-48HGD-435M		LR8-48HGD-440M		LR8-48HGD-445M		LR8-48HGD-450M		LR8-48HGD-455M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	327.3	435	331.1	440	334.9	445	338.8	450	342.6	455	346.4
Open Circuit Voltage (Voc/V)	34.77	33.04	34.91	33.17	35.05	33.30	35.19	33.44	35.33	33.57	35.47	33.70
Short Circuit Current (Isc/A)	15.71	12.62	15.81	12.70	15.91	12.78	16.01	12.86	16.12	12.95	16.22	13.02
Voltage at Maximum Power (Vmp/V)	29.06	26.86	29.20	27.75	29.34	27.88	29.48	28.02	29.62	28.15	29.76	28.28
Current at Maximum Power (Imp/A)	14.80	12.19	14.90	11.93	15.00	12.01	15.10	12.11	15.20	12.18	15.30	12.25
Module Efficiency(%)	21.5		21.8		22.0		22.3		22.5		22.8	

Electrical characteristics with different rear side power gain (reference to 440W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
462	35.05	16.71	28.54	16.19	5%
484	35.05	17.50	28.54	16.96	10%
508	35.15	18.30	28.64	17.73	15%
530	35.15	19.09	28.64	18.50	20%
552	35.15	19.89	28.64	19.27	25%

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
Bifaciality	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