

Hi-MO 7

LR8-66HGD 630~650M

- High-performance PV modules for utility power plants
- 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, 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



24.1%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

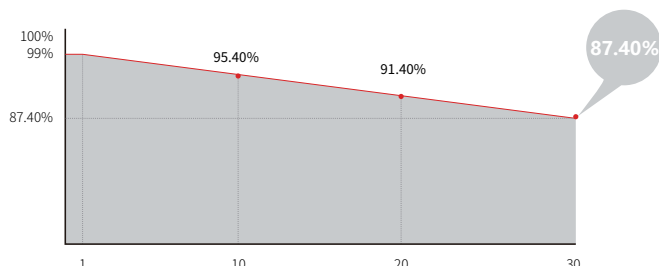
<1%
FIRST YEAR
POWER DEGRADATION

0.4%
YEAR 2-30
POWER DEGRADATION

HALF-CELL
Lower operating temperature

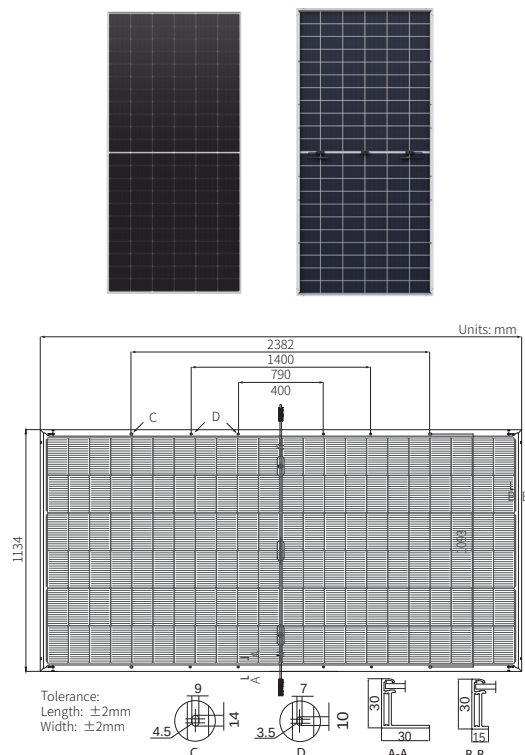
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	132 (6×22)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	32.3kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 144pcs per 20' GP / 720pcs or 576pcs (only for USA) 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: ±3%

Module Type	LR8-66HGD-630M		LR8-66HGD-635M		LR8-66HGD-640M		LR8-66HGD-645M		LR8-66HGD-650M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	630	479.58	635	483.36	640	486.7	645	490.1	650	493.8
Open Circuit Voltage (Voc/V)	49.18	46.74	49.38	46.93	49.58	47.12	49.78	47.31	49.98	47.50
Short Circuit Current (Isc/A)	16.15	12.97	16.22	13.01	16.28	13.05	16.34	13.09	16.40	13.13
Voltage at Maximum Power (Vmp/V)	41.31	39.26	41.51	39.45	41.71	39.64	41.91	39.83	42.11	40.02
Current at Maximum Power (Imp/A)	15.26	12.22	15.31	12.25	15.36	12.28	15.40	12.31	15.44	12.34
Module Efficiency(%)	23.3		23.5		23.7		23.9		24.1	

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

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
672	49.58	17.09	41.71	16.12	5%
706	49.68	17.91	41.81	16.89	10%
738	49.68	18.72	41.81	17.65	15%
770	49.68	19.54	41.81	18.42	20%
802	49.68	20.35	41.81	19.19	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 29 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