

# Hi-MO 7

N-type TopCon Cell Structure

## LR7-72HGD

# 585~620M

- 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



**23.0%**  
MAX MODULE  
EFFICIENCY

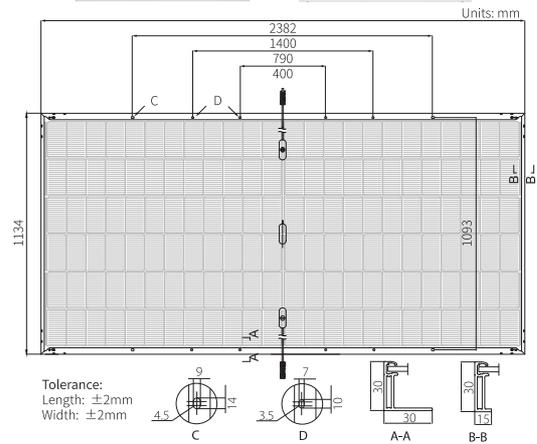
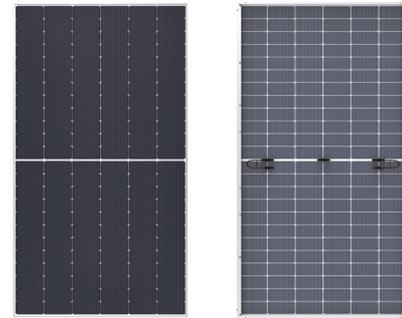
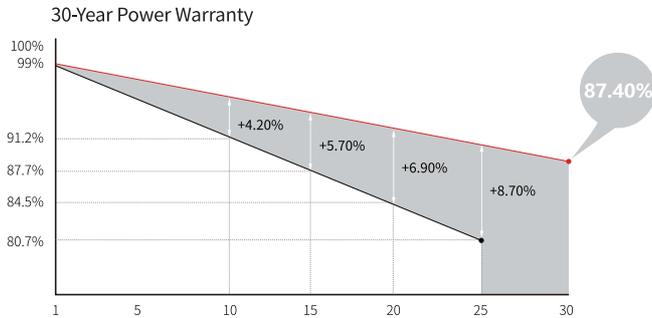
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

**HALF-CELL**  
Lower operating temperature

## Additional Value



## Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	33.5kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20' GP / 720pcs 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	LR7-72HGD-585M		LR7-72HGD-590M		LR7-72HGD-595M		LR7-72HGD-600M		LR7-72HGD-605M		LR7-72HGD-610M		LR7-72HGD-615M		LR7-72HGD-620M	
	STC	NOCT														
Maximum Power (Pmax/W)	585	445.3	590	449.1	595	452.9	600	456.7	605	460.6	610	464.4	615	468.2	620	472.0
Open Circuit Voltage (Voc/V)	51.89	49.32	52.00	49.42	52.11	49.53	52.22	49.63	52.33	49.73	52.44	49.84	52.55	49.94	52.66	50.05
Short Circuit Current (Isc/A)	14.25	11.45	14.33	11.51	14.41	11.58	14.49	11.64	14.57	11.70	14.65	11.76	14.73	11.83	14.81	11.90
Voltage at Maximum Power (Vmp/V)	43.79	41.62	43.90	41.72	44.01	41.83	44.12	41.93	44.23	42.03	44.34	42.14	44.44	42.23	44.55	42.34
Current at Maximum Power (Imp/A)	13.36	10.70	13.44	10.77	13.52	10.83	13.60	10.89	13.68	10.96	13.76	11.03	13.84	11.09	13.92	11.15
Module Efficiency(%)	21.7		21.8		22.0		22.2		22.4		22.6		22.8		23.0	

## Electrical characteristics with different rear side power gain (reference to 605W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
635	52.33	15.30	44.23	14.36	5%
666	52.33	16.03	44.23	15.05	10%
696	52.43	16.76	44.33	15.73	15%
726	52.43	17.49	44.33	16.41	20%
756	52.43	18.22	44.33	17.10	25%

## Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
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