

Hi-MO 7

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

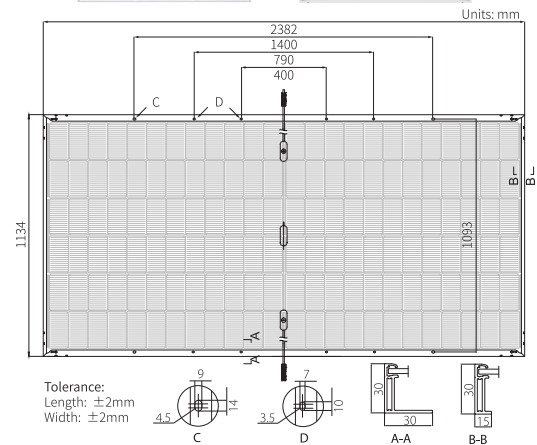
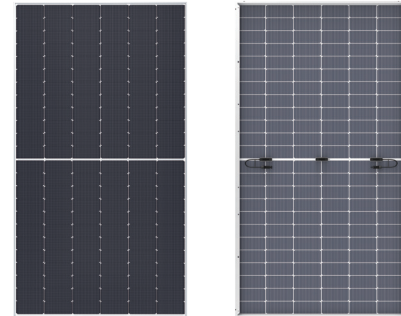
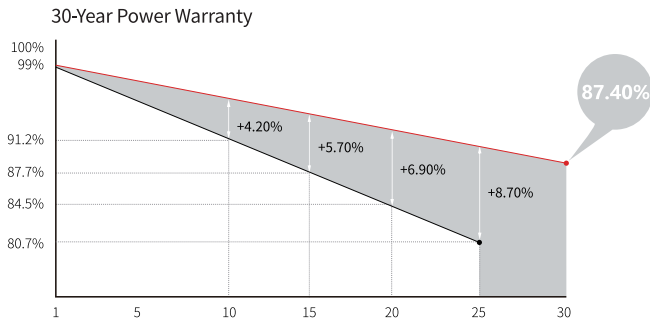
0~3%
POWER
TOLERANCE

<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 ² , +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 / 144pcs per 20' GP / 720pcs 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: ±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 | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | 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) | 52.01 | 49.43 | 52.12 | 49.53 | 52.23 | 49.64 | 52.34 | 49.74 | 52.44 | 49.84 | 52.55 | 49.94 | 52.66 | 50.04 | 52.77 | 50.15 |
| Short Circuit Current (Isc/A) | 14.29 | 11.48 | 14.37 | 11.54 | 14.45 | 11.61 | 14.53 | 11.67 | 14.61 | 11.74 | 14.69 | 11.80 | 14.77 | 11.86 | 14.85 | 11.92 |
| Voltage at Maximum Power (Vmp/V) | 43.57 | 41.41 | 43.68 | 41.51 | 43.79 | 41.63 | 43.90 | 41.72 | 44.00 | 41.82 | 44.11 | 41.92 | 44.22 | 42.03 | 44.33 | 42.13 |
| Current at Maximum Power (Imp/A) | 13.43 | 10.76 | 13.51 | 10.82 | 13.59 | 10.88 | 13.67 | 10.95 | 13.75 | 11.02 | 13.83 | 11.08 | 13.91 | 11.14 | 13.99 | 11.21 |
| 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 | 52.44 | 15.35 | 44.00 | 14.44 | 5% |
| 666 | 52.44 | 16.08 | 44.00 | 15.13 | 10% |
| 696 | 52.54 | 16.81 | 44.10 | 15.81 | 15% |
| 726 | 52.54 | 17.54 | 44.10 | 16.50 | 20% |
| 756 | 52.54 | 18.27 | 44.10 | 17.19 | 25% |

Operating Parameters

| | |
|------------------------------------|---------------------------|
| Operational Temperature | -40°C ~ +85°C |
| Power Output Tolerance | 0 ~ 3% |
| Maximum System Voltage | DC1500V (IEC/UL) |
| Maximum Series Fuse Rating | 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 |