

# Hi-MO 7

## LR5-72HGD 560~590M

- 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



**22.8%**  
MAX MODULE  
EFFICIENCY

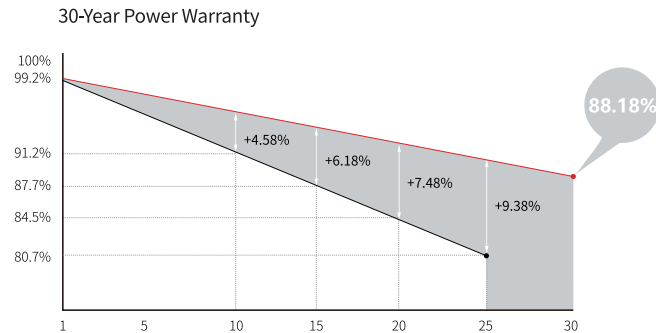
**0~3%**  
POWER  
TOLERANCE

**<0.8%**  
FIRST YEAR  
POWER DEGRADATION

**0.38%**  
YEAR 2-30  
POWER DEGRADATION

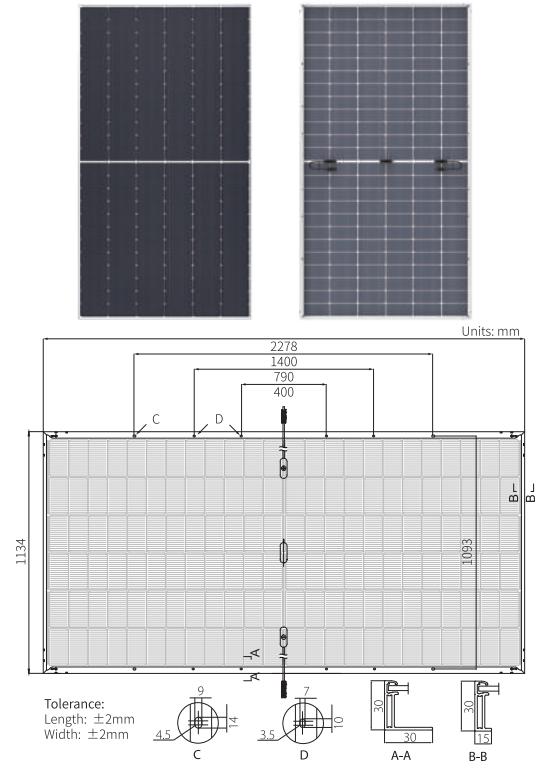
**HALF-CELL**  
Lower operating temperature

## Additional Value



## Mechanical Parameters

|                  |                                                                     |
|------------------|---------------------------------------------------------------------|
| Cell Orientation | 144 (6×24)                                                          |
| Junction Box     | IP68, three diodes                                                  |
| Output Cable     | 4mm <sup>2</sup> , +400, -200mm/±1400mm<br>length can be customized |
| Glass            | Dual glass, 2.0+2.0mm semi-tempered glass                           |
| Frame            | Anodized aluminum alloy frame                                       |
| Weight           | 31.8kg                                                              |
| Dimension        | 2278×1134×30mm                                                      |
| 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                      | LR5-72HGD-560M |       | LR5-72HGD-565M |       | LR5-72HGD-570M |       | LR5-72HGD-575M |       | LR5-72HGD-580M |       | LR5-72HGD-585M |       | LR5-72HGD-590M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition                | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 560            | 426.3 | 565            | 430.1 | 570            | 433.9 | 575            | 437.7 | 580            | 441.5 | 585            | 445.3 | 590            | 449.1 |
| Open Circuit Voltage (Voc/V)     | 50.99          | 48.46 | 51.09          | 48.55 | 51.19          | 48.65 | 51.30          | 48.75 | 51.41          | 48.86 | 51.52          | 48.96 | 51.63          | 49.07 |
| Short Circuit Current (Isc/A)    | 13.89          | 11.16 | 13.97          | 11.22 | 14.05          | 11.29 | 14.14          | 11.35 | 14.22          | 11.42 | 14.30          | 11.48 | 14.38          | 11.55 |
| Voltage at Maximum Power (Vmp/V) | 42.82          | 40.69 | 42.91          | 40.78 | 43.00          | 40.87 | 43.11          | 40.97 | 43.22          | 41.07 | 43.33          | 41.18 | 43.44          | 41.28 |
| Current at Maximum Power (Imp/A) | 13.08          | 10.48 | 13.17          | 10.55 | 13.26          | 10.62 | 13.34          | 10.68 | 13.42          | 10.75 | 13.51          | 10.82 | 13.59          | 10.89 |
| Module Efficiency(%)             | 21.7           |       | 21.9           |       | 22.1           |       | 22.3           |       | 22.5           |       | 22.6           |       | 22.8           |       |

## Electrical characteristics with different rear side power gain (reference to 575W front)

| Pmax /W | Voc/V | Isc /A | Vmp/V | Imp /A | Pmax gain |
|---------|-------|--------|-------|--------|-----------|
| 604     | 51.30 | 14.84  | 43.11 | 14.00  | 5%        |
| 633     | 51.30 | 15.55  | 43.11 | 14.67  | 10%       |
| 661     | 51.40 | 16.26  | 43.21 | 15.34  | 15%       |
| 690     | 51.40 | 16.96  | 43.21 | 16.01  | 20%       |
| 719     | 51.40 | 17.67  | 43.21 | 16.67  | 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±10%                    |
| Fire Rating                        | UL type 29<br>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 |