

# Hi-MO 9

## LR8-66HYD 635~670M

- Products for utility with optimal power generation through the entire lifecycle
- Performance improvement leads to a more than 6.5% power generation gain
- TaiRay wafer & BC technology enhances high product reliability
- Smart manufacturing & LONGi product lifecycle standards deliver exceptional product quality



12-year Warranty for  
Materials and Processing



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



**24.8%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

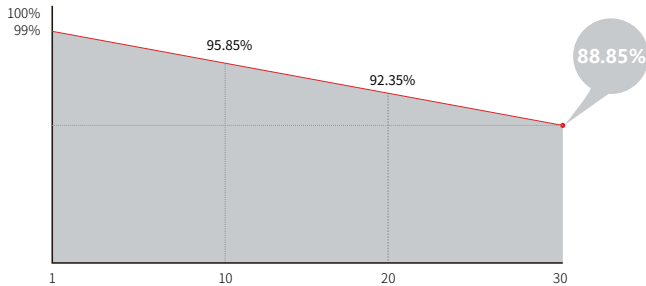
**<1%**  
FIRST YEAR  
POWER DEGRADATION

**0.35%**  
YEAR 2-30  
POWER DEGRADATION

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

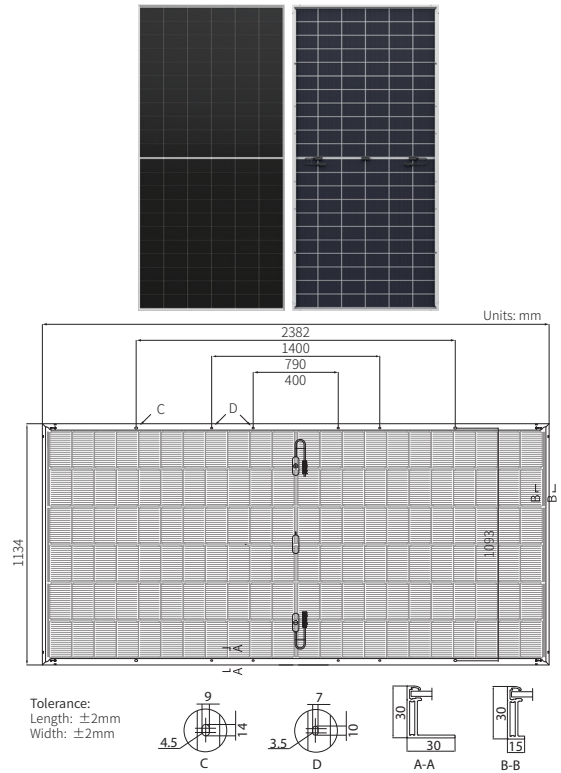
### Additional Value

#### 30-Year Power Warranty



### Mechanical Parameters

|                  |                                                                     |
|------------------|---------------------------------------------------------------------|
| Cell Orientation | 132 (6×22)                                                          |
| Junction Box     | IP68, three diodes                                                  |
| Output Cable     | 4mm <sup>2</sup> , +400, -200mm/±1400mm<br>length can be customized |
| Glass            | Dual glass, 2.0+2.0mm heat strengthened 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/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                      | LR8-66HYD-635M |       | LR8-66HYD-640M |       | LR8-66HYD-645M |       | LR8-66HYD-650M |       | LR8-66HYD-655M |       | LR8-66HYD-660M |       | LR8-66HYD-665M |       | LR8-66HYD-670M |       |
|----------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition                | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  | STC            | NOCT  |
| Maximum Power (Pmax/W)           | 635            | 483.8 | 640            | 487.5 | 645            | 491.5 | 650            | 495.3 | 655            | 498.9 | 660            | 503.0 | 665            | 506.7 | 670            | 510.5 |
| Open Circuit Voltage (Voc/V)     | 49.42          | 46.97 | 49.52          | 47.06 | 49.62          | 47.16 | 49.72          | 47.25 | 49.82          | 47.35 | 49.92          | 47.44 | 50.02          | 47.54 | 50.12          | 47.63 |
| Short Circuit Current (Isc/A)    | 16.30          | 13.09 | 16.38          | 13.16 | 16.46          | 13.22 | 16.54          | 13.28 | 16.62          | 13.35 | 16.70          | 13.41 | 16.78          | 13.48 | 16.86          | 13.54 |
| Voltage at Maximum Power (Vmp/V) | 40.68          | 38.66 | 40.78          | 38.76 | 40.88          | 38.85 | 40.98          | 38.95 | 41.08          | 39.04 | 41.18          | 39.14 | 41.28          | 39.23 | 41.38          | 39.33 |
| Current at Maximum Power (Imp/A) | 15.61          | 12.51 | 15.69          | 12.58 | 15.78          | 12.65 | 15.86          | 12.72 | 15.94          | 12.78 | 16.03          | 12.85 | 16.11          | 12.92 | 16.19          | 12.98 |
| Module Efficiency(%)             | 23.5           |       | 23.7           |       | 23.9           |       | 24.1           |       | 24.2           |       | 24.4           |       | 24.6           |       | 24.8           |       |

### Electrical characteristics with different rear side power gain (reference to 645W front)

| Pmax /W | Voc/V | Isc /A | Vmp/V | Imp /A | Pmax gain |
|---------|-------|--------|-------|--------|-----------|
| 677     | 49.62 | 17.28  | 40.88 | 16.57  | 5%        |
| 710     | 49.62 | 18.11  | 40.88 | 17.36  | 10%       |
| 744     | 49.62 | 18.93  | 40.98 | 18.15  | 15%       |
| 776     | 49.72 | 19.75  | 40.98 | 18.94  | 20%       |
| 808     | 49.72 | 20.58  | 40.98 | 19.73  | 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                        | 75±5%                     |
| 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  | +0.050%/°C |
| Temperature Coefficient of Voc  | -0.200%/°C |
| Temperature Coefficient of Pmax | -0.260%/°C |