# Hi-MO X10 Guardian Anti-Dust

## LR7-72HVDF

# 640~665M

- Equipped with HPBC 2.0 cell, inheriting high-efficiency gene
- Unique frame design effectively reduces the impact of dust accumulation and improves power generation gain throughout the entire lifecycle
- High reliability, stable operation under harsh conditions
- More suitable for industrial and commercial color corrugated steel sheet roof and small angle installation scenarios



15 15-year Warranty for Materials and Processing

30 30-year Warranty for Extra Linear Power Output

### Complete System and Product Certifications

IEC 61215, IEC 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

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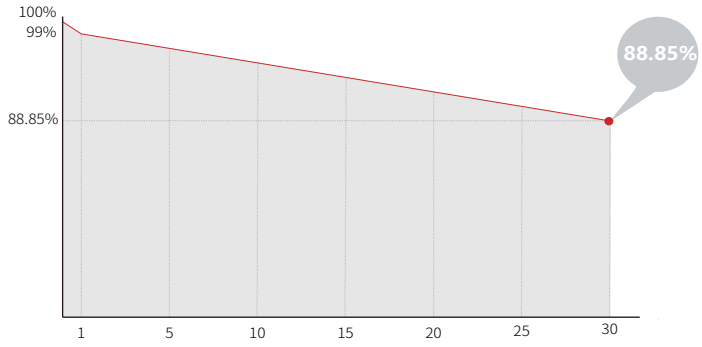
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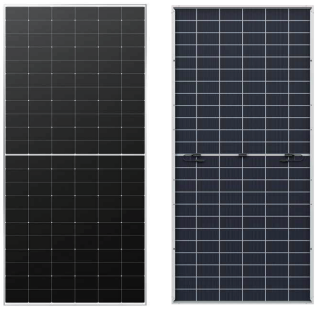
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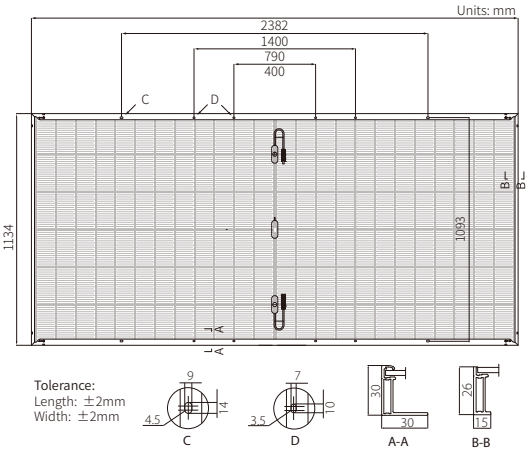
| 24.6% | 0~3% | <1% | 0.35% | BC-CELL |
|---|---|---|---|---|
| MAX MODULE EFFICIENCY | POWER TOLERANCE | FIRST YEAR POWER DEGRADATION | YEAR 2-30 POWER DEGRADATION | LOWER OPERATING TEMPERATURE |

## Additional Value

30-Year Power Warranty






## Mechanical Parameters

| | |
|---|---|
| Cell Orientation | 144 (6×24) |
| Junction Box | IP68, three diodes |
| Output Cable | 4mm², +400, -200mm/±1400mm length can be customized |
| Glass | Double glass, 2.0mm semi-tempered glass |
| Frame | Anodized aluminum alloy frame |
| Weight | 33.5kg |
| Dimension | 2382×1134×30mm |
| Packaging | 35pcs per pallet / 140pcs per 20' GP / 700pcs 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 | LR7-72HVDF-640M | | LR7-72HVDF-645M | | LR7-72HVDF-650M | | LR7-72HVDF-655M | | LR7-72HVDF-660M | | LR7-72HVDF-665M | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum Power (Pmax/W) | 640 | 487 | 645 | 491 | 650 | 495 | 655 | 499 | 660 | 502 | 665 | 506 |
| Open Circuit Voltage (Voc/V) | 54.02 | 51.34 | 54.12 | 51.43 | 54.22 | 51.53 | 54.32 | 51.62 | 54.42 | 51.72 | 54.52 | 51.81 |
| Short Circuit Current (Isc/A) | 14.98 | 12.03 | 15.06 | 12.10 | 15.14 | 12.16 | 15.22 | 12.22 | 15.30 | 12.29 | 15.35 | 12.33 |
| Voltage at Maximum Power (Vmp/V) | 44.67 | 42.45 | 44.77 | 42.55 | 44.87 | 42.64 | 44.97 | 42.74 | 45.07 | 42.83 | 45.17 | 42.93 |
| Current at Maximum Power (Imp/A) | 14.33 | 11.49 | 14.41 | 11.55 | 14.49 | 11.61 | 14.57 | 11.68 | 14.65 | 11.75 | 14.72 | 11.80 |
| Module Efficiency(%) | 23.7 | | 23.9 | | 24.1 | | 24.2 | | 24.4 | | 24.6 | |

### Electrical characteristics with different rear side power gain(Taking 655W as the baseline)

| Pmax /W | Voc/V | Isc /A | Vmp/V | Imp /A | Pmax gain |
|---|---|---|---|---|---|
| 688 | 54.32 | 15.98 | 44.97 | 15.30 | 5% |
| 721 | 54.32 | 16.74 | 44.97 | 16.03 | 10% |
| 755 | 54.42 | 17.50 | 45.07 | 16.76 | 15% |
| 788 | 54.42 | 18.26 | 45.07 | 17.48 | 20% |
| 821 | 54.42 | 19.03 | 45.07 | 18.21 | 25% |

## Operating Parameters

| | |
|---|---|
| Operational Temperature | -40°C ~ +85°C |
| Power Output Tolerance | 0 ~ 3% |
| Maximum System Voltage | DC1500V (IEC) |
| Maximum Series Fuse Rating | 30A |
| Nominal Operating Cell Temperature | 45±2°C |
| Protection Class | Class II |
| Bifaciality | 70±5% |
| Fire Rating | 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 |

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Specifications included in this datasheet are subject to change without notice.
LONGi reserves the right of final interpretation. (20250528 BGV02)