

# Hi-MO X10 Guardian Anti-Dust

## LR7-72HVDF 640~670M

- 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

**24.80%**  
MAX MODULE  
EFFICIENCY

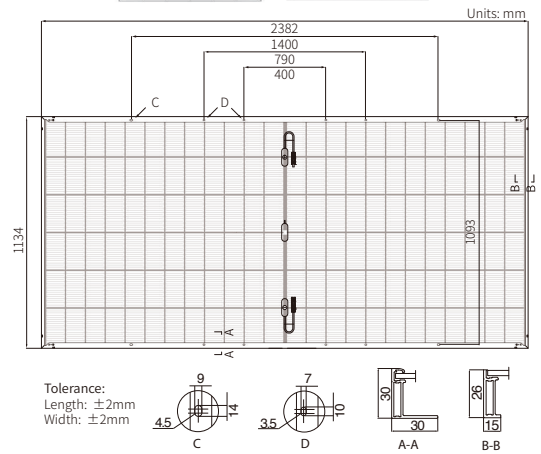
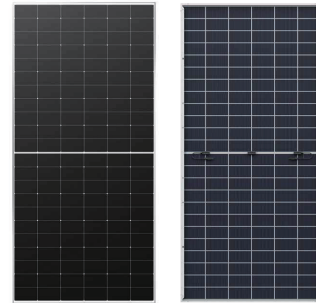
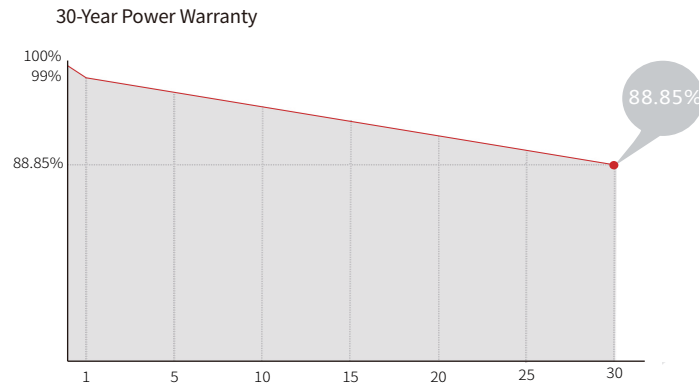
**0~3%**  
POWER  
TOLERANCE

**1%**  
FIRST YEAR  
POWER DEGRADATION

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

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

**Additional Value**



**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	Double glass, 2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	32.5kg
Dimension	2382×1134×30mm
Packaging	35pcs per pallet / 140pcs per 20' GP / 700pcs per 40' HC

**Electrical Characteristics** STC: AM1.5 1000W/m<sup>2</sup> 25°C 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	LR7-72HVDF-670M
Testing Condition	STC	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	640	645	650	655	660	665	670
Open Circuit Voltage (Voc/V)	54.02	54.12	54.22	54.32	54.42	54.52	54.62
Short Circuit Current (Isc/A)	14.98	15.06	15.14	15.22	15.30	15.38	15.46
Voltage at Maximum Power (Vmp/V)	44.67	44.77	44.87	44.97	45.07	45.17	45.27
Current at Maximum Power (Imp/A)	14.33	14.41	14.49	14.57	14.65	14.72	14.80
Module Efficiency(%)	23.69	23.88	24.06	24.25	24.43	24.62	24.80

**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