

# Hi-MO X10 Scientist

## LR7-72HVH 640~670M

- Suitable for Distribution Market
- Highest efficiency with the best energy generation performance
- TaiRay wafer & BC technology enhances high product reliability
- Smart manufacturing & LONGi product lifecycle standards deliver exceptional product quality

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

**LONGI**



CE

**24.8%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

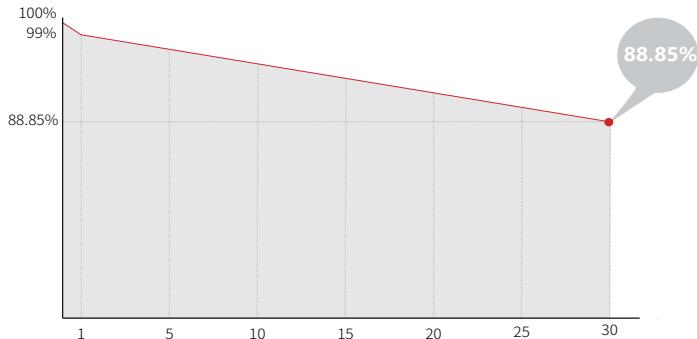
**<1%**  
FIRST YEAR  
POWER DEGRADATION

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

**BC-CELL**  
LOWER OPERATING  
TEMPERATURE

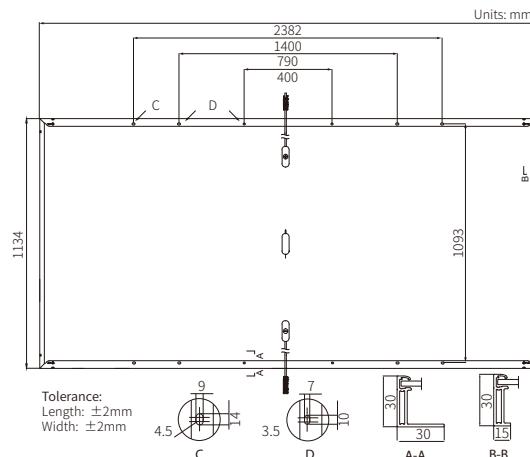
## Additional Value

30-Year Power Warranty



## Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	28.5kg
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	LR7-72HVH-640M	LR7-72HVH-645M	LR7-72HVH-650M	LR7-72HVH-655M	LR7-72HVH-660M	LR7-72HVH-665M
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	640	487	645	491	650	495
Open Circuit Voltage (Voc/V)	53.70	51.04	53.80	51.13	53.90	51.23
Short Circuit Current (Isc/A)	15.13	12.15	15.21	12.22	15.29	12.28
Voltage at Maximum Power (Vmp/V)	44.36	42.15	44.46	42.25	44.56	42.35
Current at Maximum Power (Imp/A)	14.43	11.56	14.51	11.63	14.59	11.69
Module Efficiency(%)	23.7		23.9		24.1	
					24.2	
					24.4	
					24.6	
					24.8	

## Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
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