

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



24.8%
MAX MODULE
EFFICIENCY

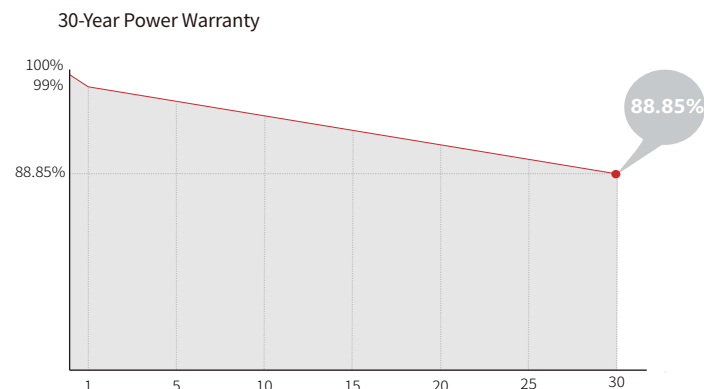
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

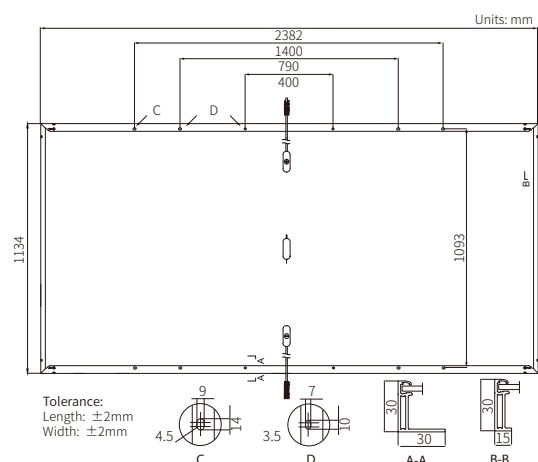
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +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/m² 25°C

NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for P_{max}: ±3%

Module Type	LR7-72HVH-640M		LR7-72HVH-645M		LR7-72HVH-650M		LR7-72HVH-655M		LR7-72HVH-660M		LR7-72HVH-665M		LR7-72HVH-670M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (P _{max} /W)	640	487	645	491	650	495	655	499	660	502	665	506	670	510
Open Circuit Voltage (V _{oc} /V)	53.70	51.04	53.80	51.13	53.90	51.23	54.00	51.32	54.10	51.42	54.20	51.51	54.30	51.61
Short Circuit Current (I _{sc} /A)	15.13	12.15	15.21	12.22	15.29	12.28	15.37	12.34	15.45	12.41	15.52	12.47	15.60	12.53
Voltage at Maximum Power (V _{mp} /V)	44.36	42.15	44.46	42.25	44.56	42.35	44.66	42.44	44.76	42.54	44.86	42.63	44.96	42.73
Current at Maximum Power (I _{mp} /A)	14.43	11.56	14.51	11.63	14.59	11.69	14.67	11.76	14.75	11.82	14.83	11.88	14.91	11.94
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 I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C