Hi-MO X10 Scientist

LR7-72HVD
640~665M

- **Advanced:** N-TaiRay + HPBC 2.0 + 0BB
- **Value-Added:** Power Leads by 30W+, A+ Anti-Shading
- **Aesthetic:** No Frontal Gridlines, Scenario Integration
- **Safe:** Prevent Localized Overheating, Less Micro-Crack



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

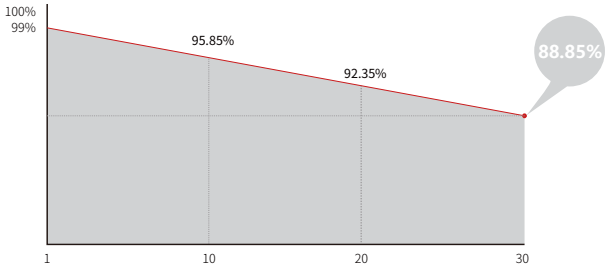
Hi-MO X10 Scientist

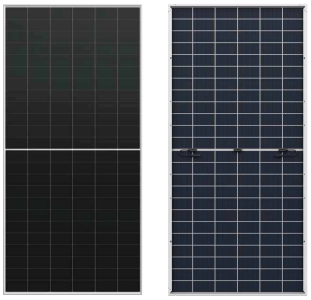
LR7-72HVD 640~665M

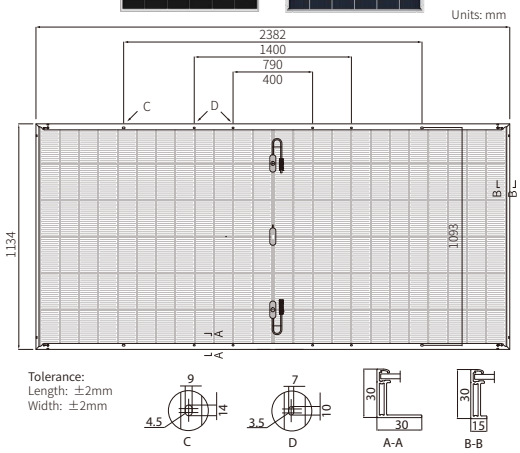
24.6%	0~3%	1%	0.35%	BC-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	LOWER OPERATING TEMPERATURE

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	Dual glass, 2.0+2.0mm semi-tempered 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/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR7-72HVD-640M		LR7-72HVD-645M		LR7-72HVD-650M		LR7-72HVD-655M		LR7-72HVD-660M		LR7-72HVD-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	15.38	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

LONGi

Specifications included in this datasheet are subject to change without notice.
LONGi reserves the right of final interpretation. (20251011 BGV03)