

Hi-MO X10 Scientist

LR8-66HVD

640~665M

- Suitable for Distribution Market
- Peak efficiency with top power generation performance
- TaiRay wafer & BC technology enhances high product reliability
- More suitable for industrial and commercial color corrugated steel sheet roofs and high temperature 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, UL 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



24.6%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOL FRANCE

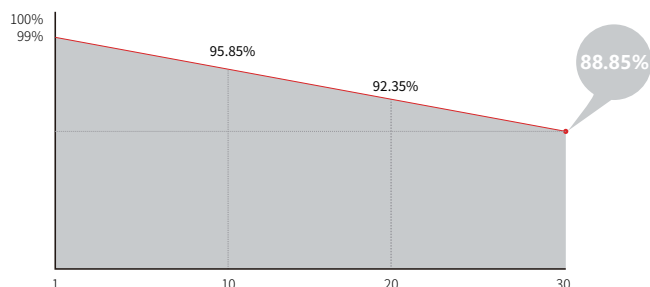
<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

BC-CELL
LOWER OPERATING
TEMPERATURE

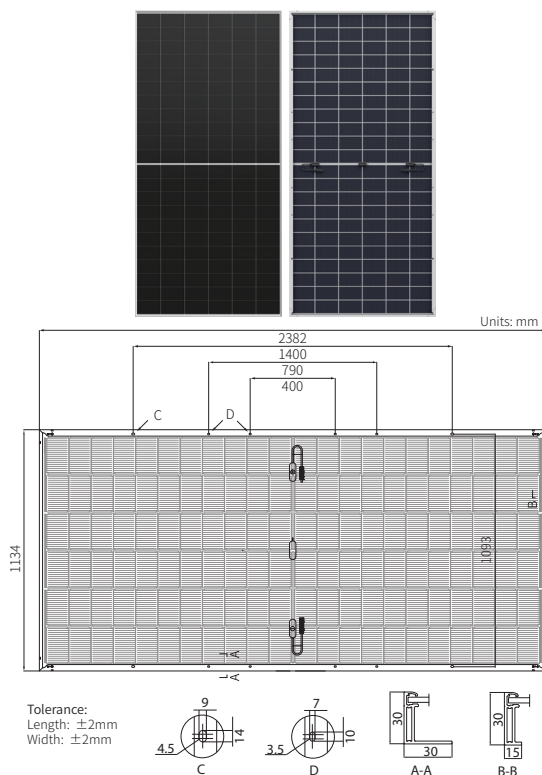
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	132 (6×22)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened 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 P_{max} : $\pm 3\%$

Module Type	LR8-66HVD-640M		LR8-66HVD-645M		LR8-66HVD-650M		LR8-66HVD-655M		LR8-66HVD-660M		LR8-66HVD-665M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	640	487.2	645	491.0	650	494.8	655	498.6	660	502.4	665	506.2
Open Circuit Voltage (Voc/V)	49.52	47.06	49.62	47.16	49.72	47.25	49.82	47.35	49.92	47.44	50.02	47.54
Short Circuit Current (Isc/A)	16.38	13.16	16.46	13.22	16.54	13.28	16.62	13.35	16.70	13.41	16.78	13.48
Voltage at Maximum Power (Vmp/V)	40.78	38.76	40.88	38.85	40.98	38.95	41.08	39.04	41.18	39.14	41.28	39.23
Current at Maximum Power (Imp/A)	15.69	12.58	15.78	12.65	15.86	12.72	15.94	12.78	16.03	12.85	16.11	12.92
Module Efficiency(%)	23.7		23.9		24.1		24.2		24.4		24.6	

Electrical characteristics with different rear side power gain (reference to 645W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
677	49.62	17.28	40.88	16.57	5%
710	49.62	18.11	40.88	17.36	10%
744	49.62	18.93	40.98	18.15	15%
776	49.72	19.75	40.98	18.94	20%
808	49.72	20.58	40.98	19.73	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	35A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	75 ± 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