

Hi-MO X10 Guardian Anti-Dust

LR7-72HVDF

640~670M



Patented Frame Design:

Effectively Reduces Dust Accumulation Impact, Boosting Power Generation by 2%+.



Scenario Adaptation:

Ideal for bifacial gain scenarios, including cement roofs and carport structures.



Safe:

Prevent Overheating, Lower temperature under shade $60^{\circ}\text{C}+1$ compare with conventional modules



Value-Added:

A+ Anti-Shading², Less Loss.



**Bifacial
Power Generation**

15Y Product Warranty

30Y Performance Warranty

Complete System and Product Certifications

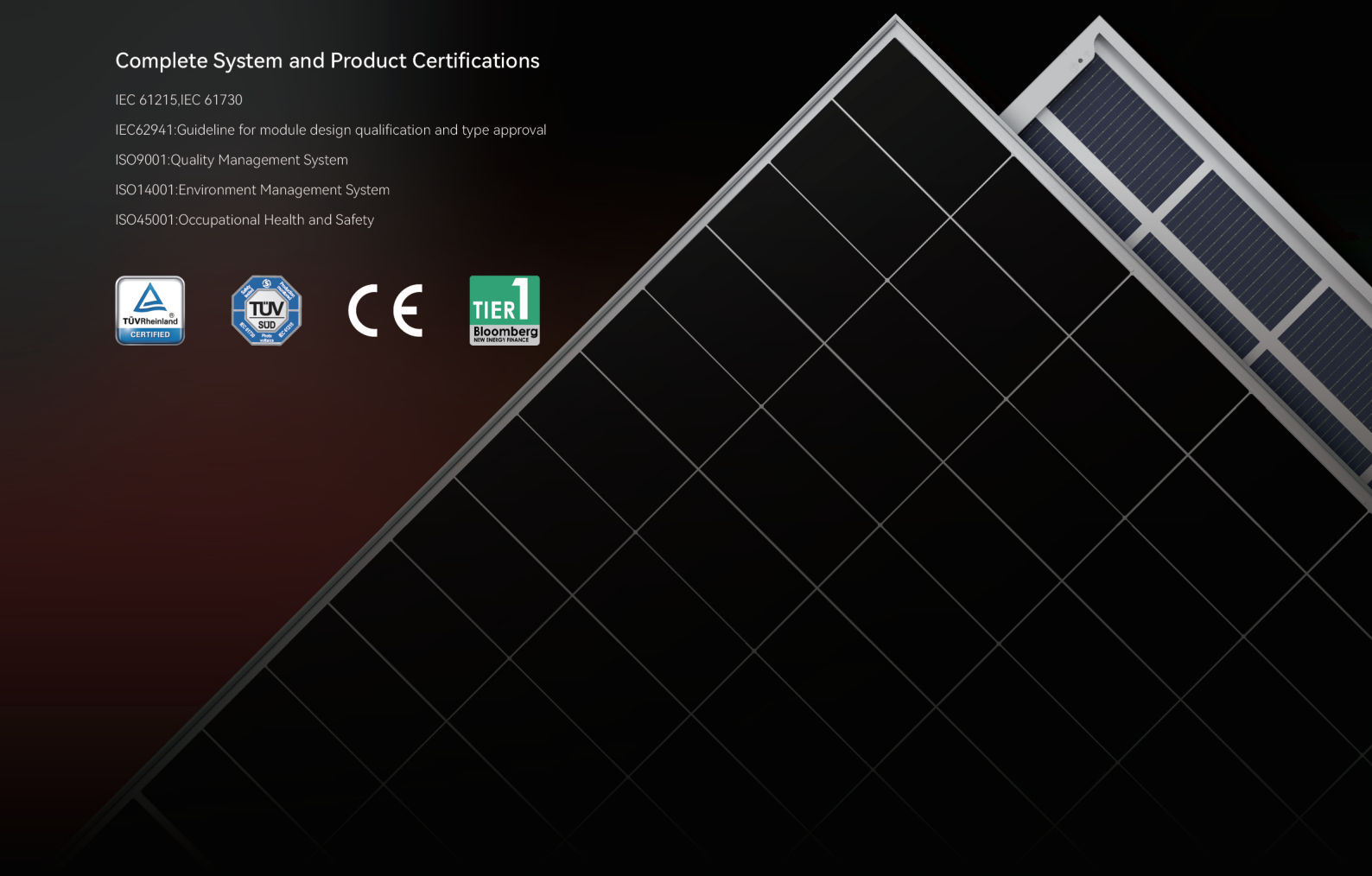
IEC 61215, IEC 61730

IEC62941: Guideline for module design qualification and type approval

ISO9001: Quality Management System

ISO14001: Environment Management System

ISO45001: Occupational Health and Safety



24.80%
MAX MODULE
EFFICIENCY

1%
FIRST YEAR
POWER DEGRADATION

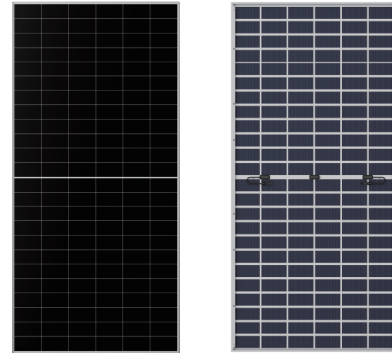
0.35%
YEAR 2-30
POWER DEGRADATION

-0.26%/°C
BETTER TEMPERATUR
COEFFICIENT

Mechanical Parameters

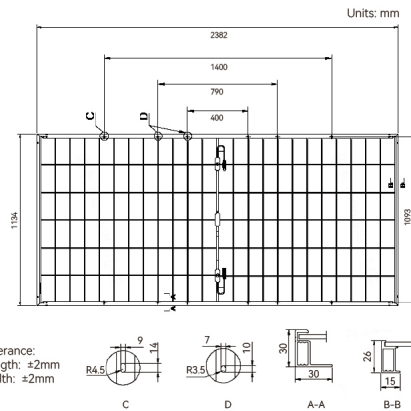
Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm ² ; +400/-200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	32.5 kg
Dimension	2382×1134×30mm
Packaging	35pcs per pallet / 140pcs per 20'GP / 700pcs per 40'HC

Remark: 17.5m trucks are rated at 30t load. Actual loading quantity is subject to vehicle specs.



Electrical characteristics with different rear side power gain

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
655	54.32	15.22	44.97	14.57	0%
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%



Electrical Characteristics -STC: Irradiance1000W/m², Cell Temperature 25°C, AM1.5 (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

Operating Parameters

Module [T98] Max	70°C
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	φPmax: 70±5%
Fire Rating	IEC Class C

Mechanical Loading

Min Designed Mechanical Load	1600Pa/1600Pa
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