

Hi-MO **X10** Scientist

LR8-48HVD

465~485M



Advanced:

TOP Efficiency, +5% Power, More Yield.



Value-Added:

A+ Anti-Shading, Less Loss.



Aesthetic:

No Gridlines, Scenario Integration.



Safe:

Prevent Overheating, Lower temperature under shade 60°C+ compare with conventional modules

HPBC
2.0



N N-type

Bifacial
Power Generation

25Y Product
Warranty

30Y Performance
Warranty

Complete System and Product Certifications

IEC 61215, IEC 61730

IEC 62941: Guideline for module design qualification and type approval

ISO 9001: Quality Management System

ISO 14001: Environment Management System

ISO 45001: Occupational Health and Safety



THE SMARTER
AWARD

24.27%

MAX MODULE
EFFICIENCY

1%

FIRST YEAR
POWER DEGRADATION

0.35%

YEAR 2-30
POWER DEGRADATION

-0.26%/°C

BETTER TEMPERATUR
COEFFICIENT

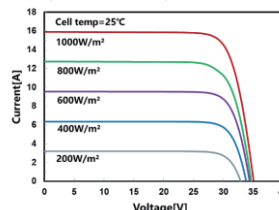
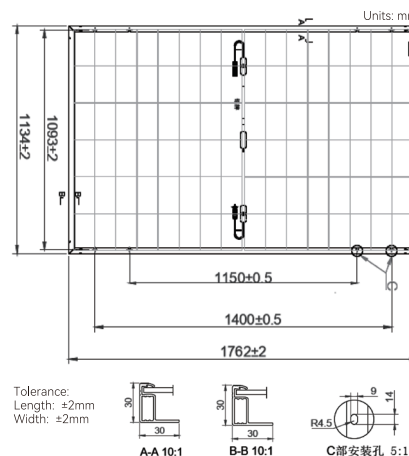
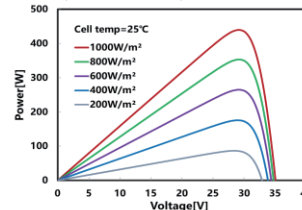
Mechanical Parameters

Cell Orientation	96 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² ; +400/-200mm/±1200mm length can be customized
Glass	Dual glass, 2.0mm semi-tempered glass, 1.6mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	23.0 kg
Dimension	1762×1134×30mm
Packaging	37pcs per pallet / 222pcs per 20'GP / 962pcs per 40'HC

Remark: 17.5m trucks are rated at 30t load. Actual loading quantity is subject to vehicle specs.
Connector PV-LR5(Longi) PV-KST4-EVO2A/xy, PV-KBT4-EVO2Aky(Staubli)

Electrical characteristics with different rear side power gain

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
470	36.11	16.49	29.75	15.80	0%
494	36.11	17.31	29.75	16.59	5%
517	36.11	18.14	29.75	17.38	10%
542	36.21	18.96	29.85	18.17	15%
566	36.21	19.78	29.85	18.96	20%
589	36.21	20.61	29.85	19.75	25%

Current-Voltage Curves
(LR8-48HVD-485M)

Power-Voltage Curves
(LR8-48HVD-485M)


BNPT: Irradiance: front 1000W/m² rear 135 W/m² 25°C AM1.5
BSI: Front 1000W/m² rear 300 W/m² 25°C AM1.5

Electrical Characteristics

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5 (Test uncertainty for Pmax: ±3%) Voc&Isc: ±5%

Module Type	LR8-48HVD-465M		LR8-48HVD-470M		LR8-48HVD-475M		LR8-48HVD-480M		LR8-48HVD-485M	
Testing Condition	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI	STC	BNPI
Maximum Power (Pmax/W)	465	512	470	518	475	523	480	529	485	534
Open Circuit Voltage (Voc/V)	36.01	36.01	36.11	36.11	36.21	36.21	36.31	36.31	36.41	36.41
Short Circuit Current (Isc/A)	16.39	18.05	16.49	18.16	16.58	18.26	16.68	18.37	16.78	18.48
Voltage at Maximum Power (Vmp/V)	29.65	29.65	29.75	29.75	29.85	29.85	29.95	29.95	30.05	30.05
Current at Maximum Power (Imp/A)	15.68	17.27	15.80	17.40	15.91	17.52	16.02	17.65	16.14	17.77
Module Efficiency (%)	23.27	25.63	23.52	25.90	23.76	26.18	24.02	26.46	24.27	26.73
BSI Short Circuit Current (A)	20.08		20.20		20.32		20.44		20.56	

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	35A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	φPmax: 75±5%
Fire Rating	IEC Class C
Power Measurement Tolerance	±3%

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



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