

Hi-MO X10 Scientist

LR7-54HVD

475~500M



Advanced:

TOP Efficiency, +5% Power, More Yield.



Value-Added:

A+ Anti-Shading¹, 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

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



THE smarter
AWARD



24.50%

MAX MODULE
EFFICIENCY

1%

FIRST YEAR
POWER DEGRADATION

0.35%

YEAR 2-30
POWER DEGRADATION

-0.26%/°C

BETTER TEMPERATUR
COEFFICIENT

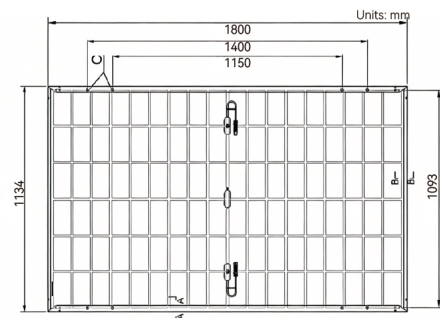
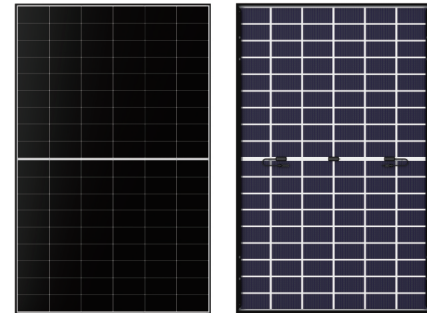
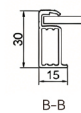
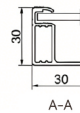
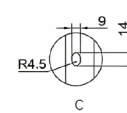
Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² ; +400/-200mm/±1200mm length can be customized
Glass	Dual glass, 2.0+1.6mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	23.5 kg
Dimension	1800×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20'GP / 864pcs 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
480	40.53	14.98	33.51	14.33	0%
504	40.53	15.73	33.51	15.04	5%
528	40.53	16.48	33.51	15.76	10%
552	40.63	17.23	33.61	16.42	15%
576	40.63	17.98	33.61	17.14	20%
600	40.63	18.73	33.61	17.85	25%


Tolerance:
Length: ±2mm
Width: ±2mm


Electrical Characteristics

·STC: Irradiance1000W/m², Cell Temperature 25°C, AM1.5 (Test uncertainty for Pmax: ±3%)

Module Type	LR7-54HVD-475M	LR7-54HVD-480M	LR7-54HVD-485M	LR7-54HVD-490M	LR7-54HVD-495M	LR7-54HVD-500M
Testing Condition	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	475	480	485	490	495	500
Open Circuit Voltage (Voc/V)	40.42	40.53	40.64	40.75	40.86	40.97
Short Circuit Current (Isc/A)	14.88	14.98	15.08	15.18	15.28	15.38
Voltage at Maximum Power (Vmp/V)	33.40	33.51	33.62	33.73	33.84	33.95
Current at Maximum Power (Imp/A)	14.23	14.33	14.43	14.53	14.63	14.73
Module Efficiency (%)	23.27	23.52	23.76	24.01	24.25	24.50

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