

Hi-MO X10 Scientist

LR7-54HVVH

480~505M



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⁺² compare with conventional modules

HPBC
2.0



N-type

**Monofacial
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**



24.74%

MAX MODULE
EFFICIENCY

1%

FIRST YEAR
POWER DEGRADATION

0.35%

YEAR 2-30
POWER DEGRADATION

-0.26%/°C

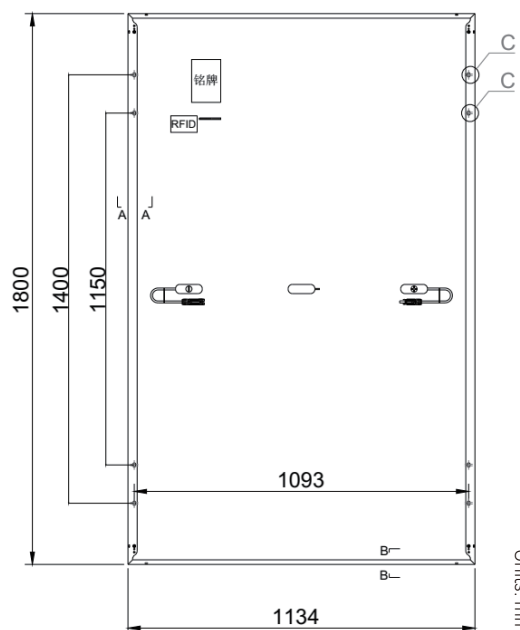
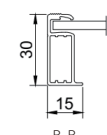
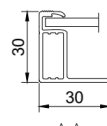
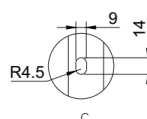
BETTER TEMPERATUR
COEFFICIENT


Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² ; +400/-200mm/±1200mm length can be customized
Glass	Single glass, 3.2mm coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	21.6 kg
Dimension	1800×1134×30mm
Packaging	37pcs per pallet / 222pcs per 20'GP / 888pcs per 40'HC

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

Tolerance:
Length: ±2mm
Width: ±2mm



Units: mm

Electrical Characteristics

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

Module Type	LR7-54HVH-480M	LR7-54HVH-485M	LR7-54HVH-490M	LR7-54HVH-495M	LR7-54HVH-500M	LR7-54HVH-505M
Testing Condition	STC	STC	STC	STC	STC	STC
Maximum Power (P _{max} /W)	480	485	490	495	500	505
Open Circuit Voltage (V _{oc} /V)	40.29	40.40	40.52	40.64	40.75	40.85
Short Circuit Current (I _{sc} /A)	15.13	15.23	15.33	15.43	15.53	15.62
Voltage at Maximum Power (V _{mp} /V)	33.28	33.40	33.51	33.62	33.73	33.84
Current at Maximum Power (I _{mp} /A)	14.43	14.53	14.63	14.73	14.83	14.93
Module Efficiency (%)	23.52	23.76	24.01	24.25	24.50	24.74

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	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
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 I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C