LONGi SOLAR

Hi-MO X10 Scientist

LR7-54HVD

475~500M

Advanced:
TOP Efficiency,+5% Power,More Yield.

Value-Added:
A+ Anti-Shading[1],Less Loss.

Aesthetic:
No Gridlines,Scenario Integration.

Safe:
Prevent Overheating,Lower temperature under shade 60℃+[2] compare with conventional modules

HPBC 2.0 | TaiRay | N-type

Bifacial Power Generation

25Y 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

TÜVRheinland CERTIFIED | TÜV SÜD | CE | TIER 1 Bloomberg NEW ENERGY FINANCE

THE smarter E AWARD



Hi-MO X10 Scientist

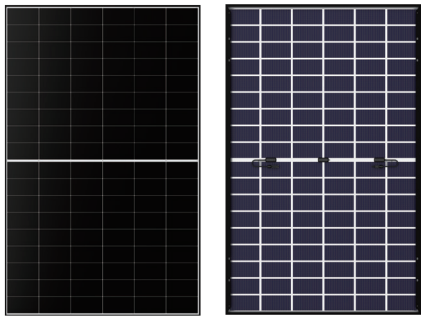
LR7-54HVD 475~500M

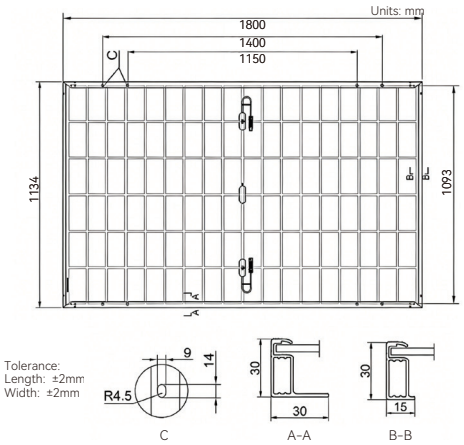
24.50%	1%	0.35%	-0.26%/℃
MAX MODULE EFFICIENCY	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	BETTER TEMPERATUR COEFFICIENT

Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm²; +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	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.





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%

Electrical Characteristics

·STC: Irradiance1000W/m², Cell Temperature 25℃, 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℃
Operational Temperature	-40℃ ~ +85℃
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2℃
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%/℃
Temperature Coefficient of Voc	-0.200%/℃
Temperature Coefficient of Pmax	-0.260%/℃

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①Data Source:TUV CN250XRQ 001 Shadow Shading Test Report, Anti-shading effect vary due to differences in test irradiation conditions, temperature, software, etc.

②Data Source:IEC 61215-2:2021, MQT 09 Hot Spot Test. A comparison was made between the test temperatures of Hi-MO X10 and conventional modules. Test data may vary due to differences in tested modules and institutions.

Specifications included in this datasheet are subject to change without notice.LONGi reserves the right of final interpretation. (BGV03 20260509)