

# Hi-MO X10 Scientist

## LR7-60HVD

### 530~555M



More flexible installation methods, suitable for short frame clamps mounting with high mechanical loading



High efficiency with better energy generation performance



N-type TaiRay wafer & HPBC 2.0 innovative technology enhances high product reliability

**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**



**24.59%**

MAX MODULE  
EFFICIENCY

**1%**

FIRST YEAR  
POWER DEGRADATION

**0.35%**

YEAR 2-30  
POWER DEGRADATION

**-0.26%/°C**

BETTER TEMPERATUR  
COEFFICIENT

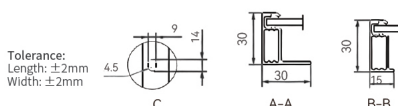
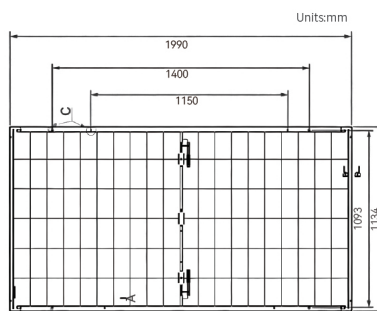
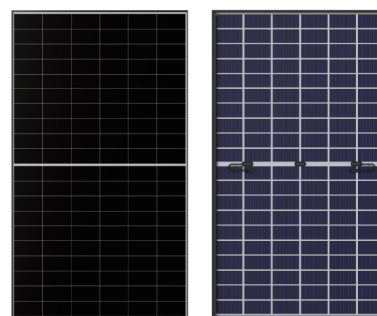
## Mechanical Parameters

Cell Orientation	120 (6×20)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> ; +400/-200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	28 kg
Dimension	1990×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20'GP / 792pcs 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
535	45.05	15.00	37.27	14.36	0%
562	45.05	15.75	37.27	15.07	5%
589	45.05	16.50	37.27	15.79	10%
615	45.15	17.25	37.37	16.47	15%
642	45.15	18.00	37.37	17.18	20%
669	45.15	18.75	37.37	17.90	25%



## Electrical Characteristics -STC: Irradiance1000W/m<sup>2</sup>, Cell Temperature 25°C, AM1.5 (Test uncertainty for Pmax: ±3%)

Module Type	LR7-60HVD-530M	LR7-60HVD-535M	LR7-60HVD-540M	LR7-60HVD-545M	LR7-60HVD-550M	LR7-60HVD-555M
Testing Condition	STC	STC	STC	STC	STC	STC
Maximum Power (Pmax/W)	530	535	540	545	550	555
Open Circuit Voltage (Voc/V)	44.95	45.05	45.15	45.25	45.35	45.45
Short Circuit Current (Isc/A)	14.90	15.00	15.10	15.20	15.30	15.40
Voltage at Maximum Power (Vmp/V)	37.17	37.27	37.37	37.47	37.57	37.67
Current at Maximum Power (Imp/A)	14.26	14.36	14.45	14.55	14.64	14.73
Module Efficiency (%)	23.49	23.71	23.93	24.15	24.37	24.59

## 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