

# Hi-MO X6 Guardian Anti Humidity & Heat

## LR5-72HTDR 565~590M

- Unique cell structure, superior resistance to humidity & heat degradation.
- Water resistant encapsulation, resist moisture intrusion.
- Ultra-low power degradation, superior power generation throughout lifecycle.
- LONGi system escort, safe and reliable use.

15

15-year Warranty for  
Materials and Processing

30

30-year Warranty for Extra  
Linear Power Output

### Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

**LONGi**



**22.8%**  
MAX MODULE  
EFFICIENCY

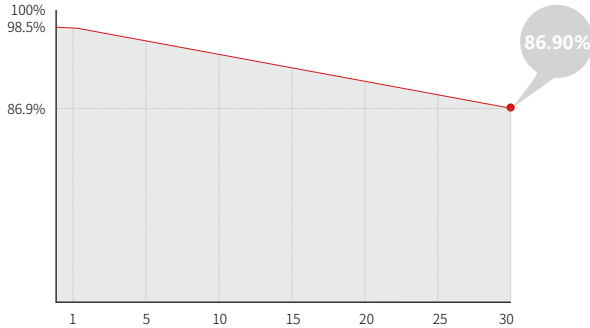
**0~3%**  
POWER  
TOLERANCE

**<1%**  
FIRST YEAR  
POWER DEGRADATION

**0.35%**  
YEAR 2-30  
POWER DEGRADATION

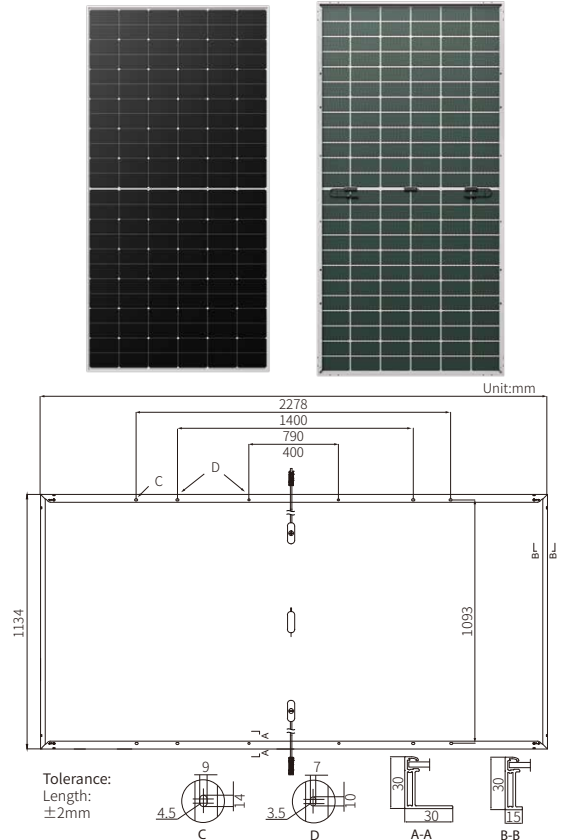
## Additional Value

### 30-Year Power Warranty



## Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Weight	31.8kg
Dimension	2278×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20' GP / 720pcs per 40' HC



## Electrical Characteristics

STC : AM1.5 1000W/m<sup>2</sup> 25°C

NOCT : AM1.5 800W/m<sup>2</sup> 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	LR5-72HTDR-565M		LR5-72HTDR-570M		LR5-72HTDR-575M		LR5-72HTDR-580M		LR5-72HTDR-585M		LR5-72HTDR-590M	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	565	422	570	426	575	430	580	433	585	437	590	441
Open Circuit Voltage (Voc/V)	51.85	48.68	52.00	48.82	52.15	48.96	52.30	49.10	52.45	49.25	52.60	49.39
Short Circuit Current (Isc/A)	13.93	11.25	14.00	11.31	14.06	11.36	14.13	11.41	14.19	11.46	14.26	11.52
Voltage at Maximum Power (Vmp/V)	43.40	39.60	43.55	39.74	43.70	39.88	43.85	40.01	44.00	40.15	44.15	40.29
Current at Maximum Power (Imp/A)	13.02	10.66	13.09	10.72	13.16	10.77	13.23	10.83	13.30	10.89	13.37	10.96
Module Efficiency(%)	21.9		22.1		22.3		22.5		22.6		22.8	

## Electrical characteristics with different rear side power gain (reference to 575W front)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
604	52.15	14.76	43.70	13.82	5%
633	52.15	15.47	43.70	14.48	10%
661	52.25	16.17	43.80	15.13	15%
690	52.25	16.87	43.80	15.79	20%
719	52.25	17.58	43.80	16.45	25%

## Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	60±5%
Fire Rating	IEC Class C

## Mechanical Loading

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	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C