

# Hi-MO 5 Ice-Shield (V4)

LR5-78HBD

585~605M

- Based on M10 wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
  - M10 Gallium-doped Wafer
  - 18-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

12

12-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**



**DRAFT**

Draft edition

**21.6%**  
MAX MODULE  
EFFICIENCY

**0~3%**  
POWER  
TOLERANCE

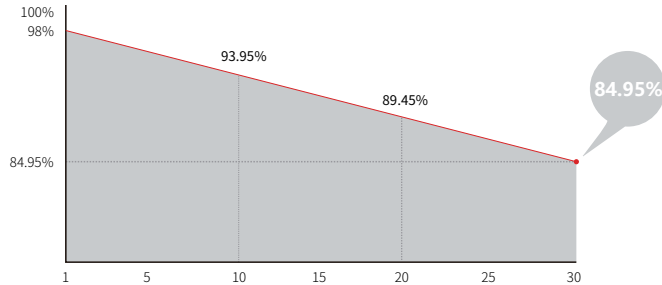
**<2%**  
FIRST YEAR  
POWER DEGRADATION

**0.45%**  
YEAR 2-30  
POWER DEGRADATION

**HALF-CELL**  
Lower operating temperature

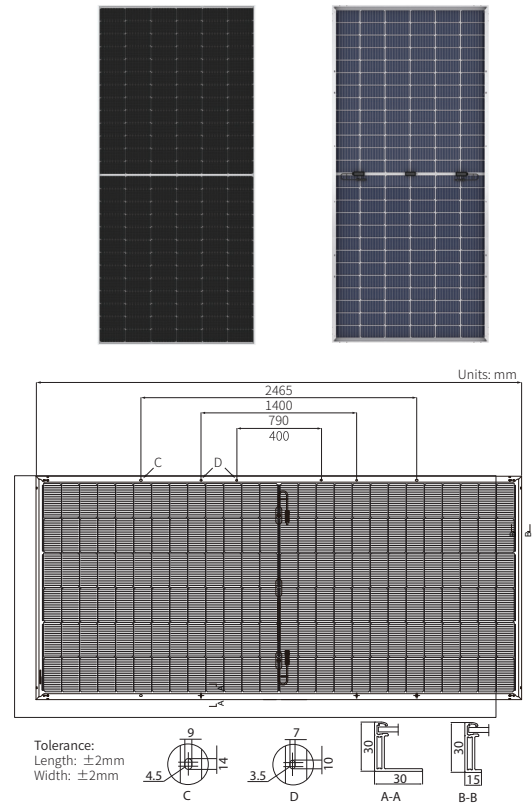
## Additional Value

### 30-Year Power Warranty



## Mechanical Parameters

Cell Orientation	156 (6×26)
Junction Box	IP68, three diodes
Output Cable	4mm <sup>2</sup> , +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 3.2mm tempered glass+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	43.5kg
Dimension	2465×1134×30mm
Packaging	36 pcs per pallet / 144pcs per 20' GP / 576 pcs per 40' HC / 432pcs per 53' DV(Only for USA)



## 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	LR5-78HBD-585M		LR5-78HBD-590M		LR5-78HBD-595M		LR5-78HBD-600M		LR5-78HBD-605M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	585	437.3	590	441.0	595	444.7	600	448.5	605	452.2
Open Circuit Voltage (Voc/V)	53.60	50.40	53.75	50.54	53.90	50.68	54.05	50.82	54.20	50.96
Short Circuit Current (Isc/A)	13.84	11.17	13.89	11.21	13.96	11.27	14.03	11.33	14.09	11.37
Voltage at Maximum Power (Vmp/V)	45.10	42.07	45.25	42.21	45.39	42.35	45.53	42.48	45.67	42.61
Current at Maximum Power (Imp/A)	12.98	10.40	13.04	10.45	13.11	10.50	13.18	10.56	13.25	10.61
Module Efficiency(%)	20.9		21.1		21.3		21.5		21.6	

## Electrical characteristics with different rear side power gain (reference to 595W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
625	53.90	14.66	45.39	13.77	5%
655	53.90	15.36	45.39	14.42	10%
684	54.00	16.05	45.49	15.08	15%
714	54.00	16.75	45.49	15.73	20%
744	54.00	17.45	45.49	16.39	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	70±5%
Fire Rating	UL type 29 IEC Class C

## Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	45mm Hailstone at the speed of 30.7m/s

## Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.265%/°C
Temperature Coefficient of Pmax	-0.340%/°C

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