

Hi-MO 4

LR4-72HBD 440~460M

- Suitable for ground power plants and large C&I projects
- Advanced module technology delivers superior module efficiency
 - M6 Gallium-doped Wafer
 - 9-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability



12-year Warranty for
Materials and Processing



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



Hi-MO4

LR4-72HBD 440~460M

21.2%

MAX MODULE
EFFICIENCY

0~3%

POWER
TOLERANCE

<2%

FIRST YEAR
POWER DEGRADATION

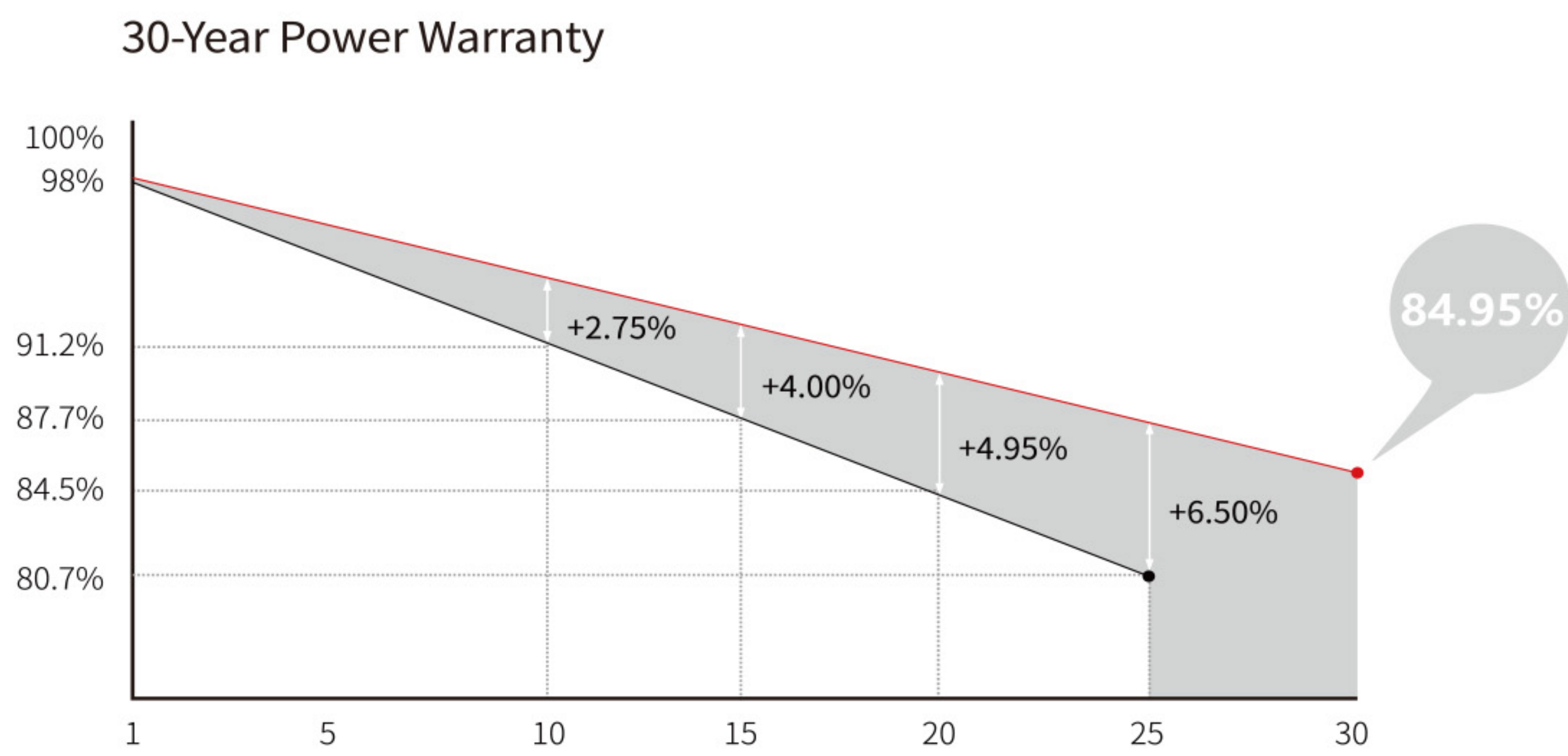
0.45%

YEAR 2-30
POWER DEGRADATION

HALF-CELL

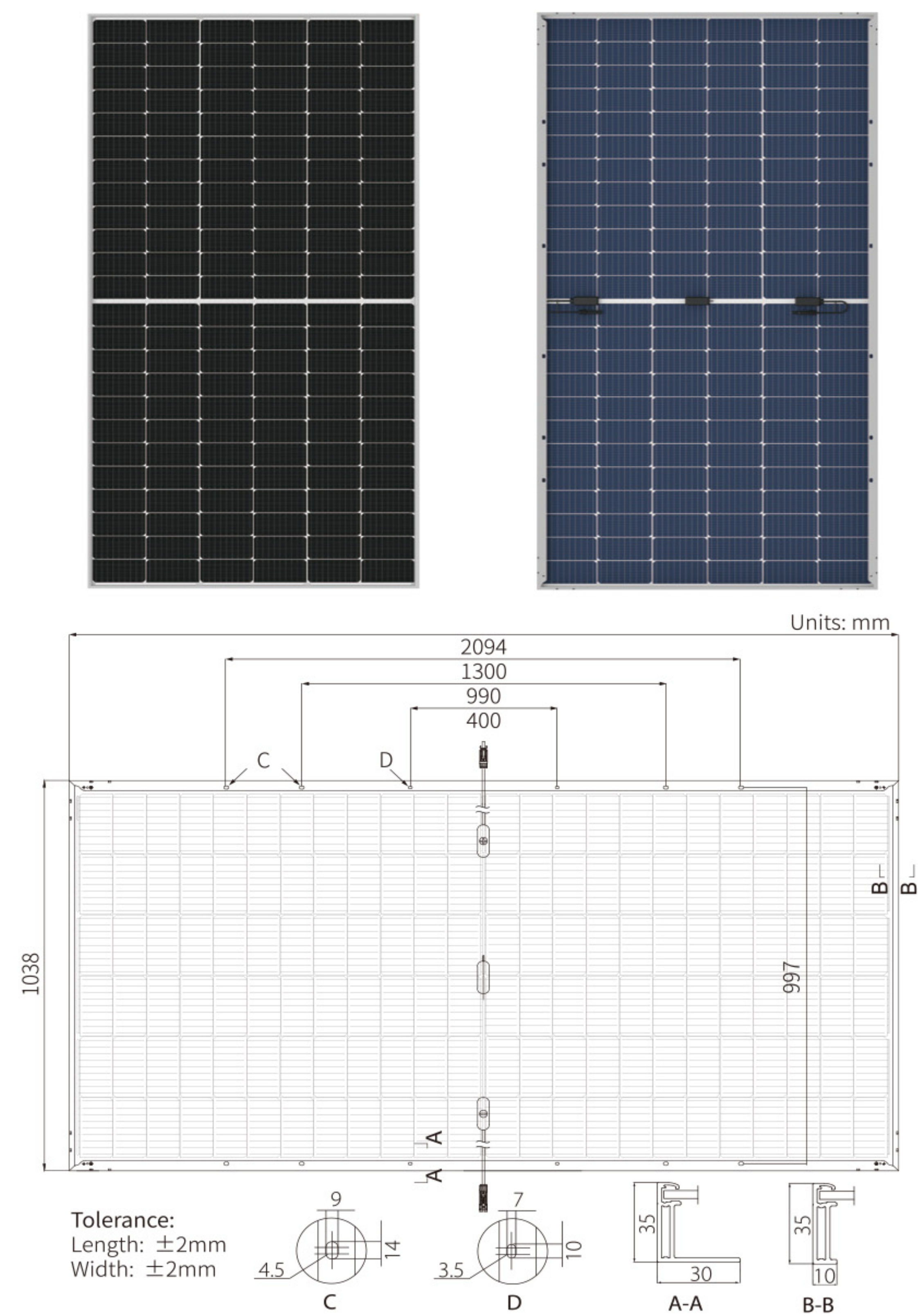
Lower operating temperature

Additional Value



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm², +400, -200mm/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	27.5kg
Dimension	2094×1038×35mm
Packaging	30pcs per pallet /660pcs per 40’ HC



Electrical Characteristics	STC : AM1.5 1000W/m² 25°C		NOCT : AM1.5 800W/m² 20°C 1m/s		Test uncertainty for Pmax: ±3%	
	LR4-72HBD-440M	LR4-72HBD-445M	LR4-72HBD-450M	LR4-72HBD-455M	LR4-72HBD-460M	
Module Type	STC	NOCT	STC	NOCT	STC	NOCT
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	440	329.8	445	333.6	450	337.3
Open Circuit Voltage (Voc/V)	49.2	46.3	49.4	46.5	49.6	46.6
Short Circuit Current (Isc/A)	11.45	9.23	11.52	9.28	11.58	9.34
Voltage at Maximum Power (Vmp/V)	41.0	38.4	41.2	38.6	41.4	38.8
Current at Maximum Power (Imp/A)	10.73	8.60	10.80	8.65	10.87	8.70
Module Efficiency(%)	20.2	20.5	20.7	20.9	21.2	

Electrical characteristics with different rear side power gain (reference to 450W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
473	49.6	12.16	41.4	11.41	5%
495	49.6	12.74	41.4	11.95	10%
518	49.7	13.32	41.5	12.50	15%
540	49.7	13.90	41.5	13.04	20%
563	49.7	14.48	41.5	13.58	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
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	25mm Hailstone at the speed of 23m/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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Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (20220810V16)