

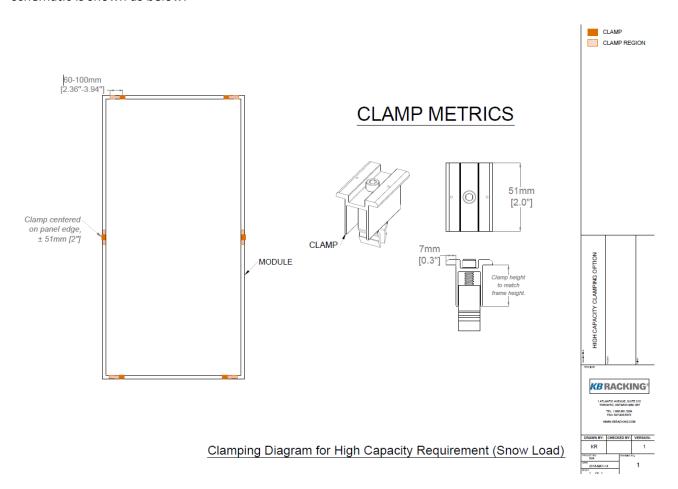
June 7, 2022

Subject: Approval Letter for KB Racking 6-Point Clamping System

To Whom It May Concern,

We, LONGi Solar Technology Co., Ltd. ("LONGi"), hereby clarify that our modules have been certified to UL1703 standard in accordance with CSA certification body. Please refer to LONGi Installation Manual for the mounting methods that are currently approved.

We hereby confirm that the usage of KB Racking mounting system of *EkonoRack 2.0* in combination with LONGi LR5-72HPH product is approved for a downforce mechanical test load of 1636Pa. The mounting schematic is shown as below:



(*) Design Load Ratings in each direction for each module is determined by calculation safety factor according to: Design Load Rating = Approved test Load / 1.5.

All mounting designs must be certified by a registered professional engineer. The mounting design and procedures must comply with local electrical and building codes. System designers and installers are solely



responsible for load calculations and the proper design of the supporting structure. Module Manufacturer will not be responsible for any defects result from the improper design, including the clamp design.

Module Datasheet is attached as an annex of this Letter.

Sincerely

Product & Solution Department

LONGi Green Energy Technology Co., Ltd.

Hi-MO 5

LR5-72HPH 535~555M

- Based on M10-182mm wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
 - M10 Gallium-doped Wafer Smart Soldering 9-busbar Half-cut Cell
- Excellent outdoor power generation performance
- High module quality ensures long-term reliability



12-year Warranty for Materials and Processing



25-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

TS62941: Guideline for module design qualification and type approval









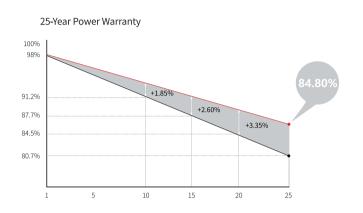


LR5-72HPH 535~555M

21.7% MAX MODULE EFFICIENCY 0~3%
POWER
TOLERANCE

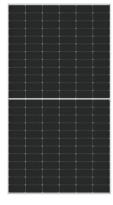
<2% FIRST YEAR POWER DEGRADATION 0.55% YEAR 2-25 POWER DEGRADATION **HALF-CELL**Lower operating temperature

Additional Value

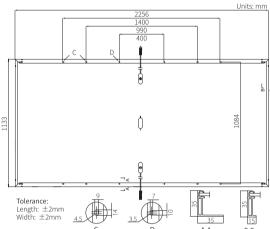


Mechanical Parameters

Cell Orientation	ion 144 (6×24)	
Junction Box	IP68, three diodes	
Output Cable	4mm 2 , +400, -200mm/ \pm 1400mm length can be customized	
Glass	Single glass, 3.2mm coated tempered glass	
Frame	Anodized aluminum alloy frame	
Weight	27.2kg	
Dimension	2256×1133×35mm	
Packaging	kaging 31pcs per pallet / 155pcs per 20' GP / 620pcs per 40' HC	







Electrical Characteristics	STC:AM1	5 1000W/r	n² 25°C	NOCT : AM	11.5 800W/r	n² 20°C 1n	1/S Test un	Test uncertainty for Pmax: ±3%			
Module Type	LR5-72HPH-535M		LR5-72F	LR5-72HPH-540M		LR5-72HPH-545M		LR5-72HPH-550M		LR5-72HPH-555M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	
Maximum Power (Pmax/W)	535	399.9	540	403.6	545	407.4	550	411.1	555	414.8	
Open Circuit Voltage (Voc/V)	49.35	46.40	49.50	46.54	49.65	46.68	49.80	46.82	49.95	46.97	
Short Circuit Current (Isc/A)	13.78	11.14	13.85	11.20	13.92	11.25	13.98	11.31	14.04	11.35	
Voltage at Maximum Power (Vmp/V)	41.50	38.55	41.65	38.69	41.80	38.83	41.95	38.97	42.10	39.11	
Current at Maximum Power (Imp/A)	12.90	10.38	12.97	10.43	13.04	10.49	13.12	10.56	13.19	10.61	
Module Efficiency(%)	20.9		21.1		21.3		21.5		21.7		

Operating Parameters

operating randineters		
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	
Fire Rating	UL type 1 or 2 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

