



Product Service

CERTIFICATE

No. Z2 099333 0111 Rev. 02

Holder of Certificate: **LONGi Green Energy Technology Co., Ltd.**
No. 388, Middle Hangtian Road
Chang'an District
710100 Xi'an City, Shaanxi
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono-crystalline Silicon Photovoltaic Module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062401243-02

Valid until: 2029-08-15

Date, 2024-08-16

(Zhulin Zhang)

CERTIFICATE

No. Z2 099333 0111 Rev. 02

Model(s):

LR5-72HTH-xxxM (xxx=540-600, in step of 5, 144 cells)
LR5-66HTH-xxxM (xxx=490-550, in step of 5, 132 cells)
LR5-54HTH-xxxM (xxx=405-450, in step of 5, 108 cells)
LR5-54HTB-xxxM (xxx=405-445, in step of 5, 108 cells)
LR5-72HTHF-xxxM (xxx=540-600, in step of 5, 144 cells)
LR5-72HPH-xxxM (xxx=525-575, in step of 5, 144 cells)
LR5-66HPH-xxxM (xxx=480-530, in step of 5, 132 cells)
LR5-60HPH-xxxM (xxx=435-480, in step of 5, 120 cells)
LR5-54HPH-xxxM (xxx=400-435, in step of 5, 108 cells)
LR5-72HIH-xxxM (xxx=525-575, in step of 5, 144 cells)
LR5-66HIH-xxxM (xxx=480-530, in step of 5, 132 cells)
LR5-60HIH-xxxM (xxx=435-480, in step of 5, 120 cells)
LR5-54HIH-xxxM (xxx=400-435, in step of 5, 108 cells)
LR7-72HTH-xxxM (xxx=590-635, in step of 5, 144 cells)
LR7-54HTH-xxxM (xxx=445-475, in step of 5, 108 cells)
LR5-36HTH-xxxM (xxx=260-290, in step of 5, 72 cells)
LR7-60HTH-xxxM (xxx=495-525, in step of 5, 120 cells)
LR7-66HTH-xxxM (xxx=550-580, in step of 5, 132 cells)
LR5-54HTHB-xxxM (xxx=400-420, in step of 5, 108 cells)
LR7-54HTHF-xxxM (xxx=445-475 in step of 5, 108 cells)
LR7-72HTHF-xxxM (xxx=590-635 in step of 5, 144 cells)
LR7-60HTHF-xxxM (xxx=495-525 in step of 5, 120 cells)
LR7-66HTHF-xxxM (xxx=550-580 in step of 5, 132 cells)
xxx stands for rated output power at STC.

Parameters:

Fire Safety Class:	Class C according to UL790.
Safety Class:	Class II
Max. System Voltage:	1500V DC
Test Laboratory:	China Telecommunication Technology Labs. CuiHu Cloud Center, No.1 Gaolizhang Road, Wenquan Town Haidian District, Beijing, China.
Construction:	Framed, with Junction box, cable and connector.

Tested according to:

IEC 61215-1:2021
IEC 61215-1-1:2021
IEC 61215-2:2021
IEC 61730-1:2023
IEC 61730-2:2023
EN IEC 61215-1-1:2021
EN IEC 61215-1:2021
EN IEC 61215-2:2021
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Hi-MO 5m

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

ISO 9001:2015: ISO Quality Management System

ISO 14001: 2015: ISO Environment Management System

TS62941: Guideline for module design qualification and type approval

ISO 45001: 2018: Occupational Health and Safety

LONGi



21.7%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

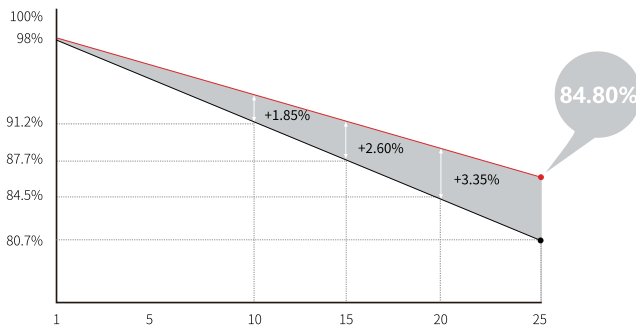
<2%
FIRST YEAR
POWER DEGRADATION

0.55%
YEAR 2-25
POWER DEGRADATION

HALF-CELL
Lower operating temperature

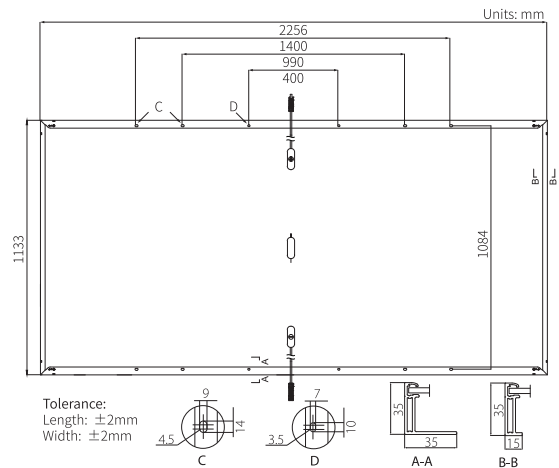
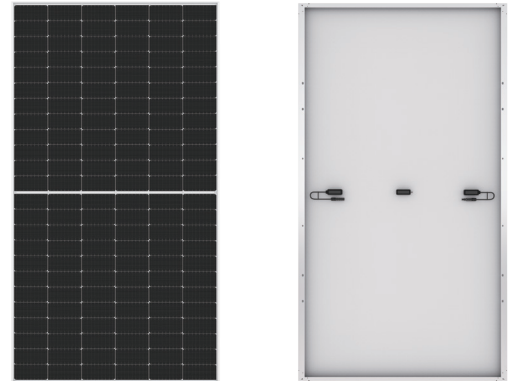
Additional Value

25-Year Power Warranty



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±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	31pcs per pallet / 155pcs per 20' GP / 620pcs 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%

Module Type	LR5-72HPH-535M		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

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



Product Service

CERTIFICATE

No. Z2 099333 0039 Rev. 36

Holder of Certificate: **LONGi Green Energy Technology Co., Ltd.**

No. 388, Middle Hangtian Road
Chang'an District
710100 Xi'an City, Shaanxi
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product:

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
Mono-Crystalline Silicon Photovoltaic Module

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Test report no.: 704061700509-38

Valid until: 2029-09-29

Date, 2024-09-30

(Zhulin Zhang)

CERTIFICATE

No. Z2 099333 0039 Rev. 36

Model(s):

LR6-72BP-xxxM (xxx=350 to 380, in step of 5)
 LR6-60BP-xxxM (xxx=290 to 315, in step of 5)
 LR6-72DG-xxxM (xxx=330 to 360, in step of 5)
 LR6-60DG-xxxM (xxx=275 to 300, in step of 5)
 LR6-72PD-xxxM (xxx=345 to 370, in step of 5)
 LR6-60PD-xxxM (xxx=290 to 305, in step of 5)
 LR6-72HBD-xxxM (xxx=360 to 395, in step of 5)
 LR6-60HBD-xxxM (xxx=300 to 325, in step of 5)
 LR6-72HIBD-xxxM (xxx=360 to 380, in step of 5)
 LR6-60HIBD-xxxM (xxx=300 to 325, in step of 5)
 LR6-78HBD-xxxM (xxx=395 to 410, in step of 5)
 LR6-78HIBD-xxxM (xxx=395 to 410, in step of 5)
 LR6-72OPD-xxxM (xxx=370 to 410, in step of 5)
 LR6-60OPD-xxxM (xxx=325 to 345, in step of 5)
 LR6-72HPD-xxxM (xxx=360 to 385, in step of 5)
 LR6-60HPD-xxxM (xxx=300 to 320, in step of 5)
 LR6-72MBD-xxxM (xxx=365 to 385, in step of 5)
 LR6-60MBD-xxxM (xxx=305 to 320, in step of 5)
 LR6-72MPD-xxxM (xxx=365 to 385, in step of 5)
 LR6-60MPD-xxxM (xxx=305 to 320, in step of 5)
 LR6-78OPD-xxxM (xxx=425)
 LR6-72HBD-xxxMC (xxx=360 to 395, in step of 5)
 LR6-60HBD-xxxMC (xxx=300 to 325, in step of 5)
 LR6-72HIBD-xxxMC (xxx=360 to 380, in step of 5)
 LR6-60HIBD-xxxMC (xxx=300 to 325, in step of 5)
 LR4-72HBD-xxxM (xxx=415 to 455, in step of 5)
 LR4-60HBD-xxxM (xxx=345 to 375, in step of 5)
 LR4-72HIBD-xxxM (xxx=415 to 450, in step of 5)
 LR4-60HIBD-xxxM (xxx=345 to 375, in step of 5)
 LR4-78HBD-xxxM (xxx=470 to 495, in step of 5)
 LR4-78ZBD-xxxM (xxx=460 to 485, in step of 5)
 LR5-72HBD-xxxM (xxx=500 to 565, in step of 5)
 LR5-66HBD-xxxM (xxx=475 to 515, in step of 5)
 LR5-72HIBD-xxxM (xxx=500 to 565, in step of 5)
 LR5-66HIBD-xxxM (xxx=475 to 515, in step of 5)
 LR5-60HBD-xxxM (xxx=435 to 470, in step of 5)
 LR5-54HBD-xxxM (xxx=390 to 425, in step of 5)
 LR5-60HIBD-xxxM (xxx=435 to 470, in step of 5)
 LR5-54HIBD-xxxM (xxx=390 to 425, in step of 5)
 LR5-78ZBD-xxxM (xxx=565 to 580, in step of 5)
 LR5-78HBD-xxxM (xxx=570 to 605, in step of 5)
 LR5-72HND-xxxM (xxx=540 to 580, in step of 5)
 LR5-66HND-xxxM (xxx=495 to 530, in step of 5)
 LR5-60HND-xxxM (xxx=450 to 480, in step of 5)
 LR5-54HND-xxxM (xxx=405 to 435, in step of 5)
 LR5-72HTD-xxxM (xxx=550 to 600, in step of 5)
 LGi4-32HPDH-xxxRM (xxx=162 to 171, in step of 3)
 LGi4-22HPD-xxxRM (xxx=129 to 138, in step of 3)
 LGi4-48HBD-xxxRM (xxx=285 to 310, in step of 5)
 LGi4-72HBC-xxxWM (xxx=360 to 410, in step of 5)
 LGi4-66HBC-xxxWM (xxx=330 to 375, in step of 5)
 LGi4-60HBC-xxxWM (xxx=300 to 340, in step of 5)
 LGi4-54HBC-xxxWM (xxx=270 to 305, in step of 5)
 LGi4-48HBC-xxxWM (xxx=240 to 270, in step of 5)
 LGi4-44HBC-xxxWM (xxx=220 to 250, in step of 5)
 LGi4-40HBC-xxxWM (xxx=200 to 225, in step of 5)
 LGi4-36HBC-xxxWM (xxx=180 to 204, in step of 3)
 LGi4-32HBC-xxxWM (xxx=162 to 180, in step of 3)
 LR5-72HBD-xxxMa (xxx=500 to 565, in step of 5)
 LR5-72HBD-xxxMc (xxx=500 to 565, in step of 5)
 LR5-72HBD-xxxMc1 (xxx=530 to 565, in step of 5)
 LR5-72HBD-xxxMc2 (xxx=530 to 565, in step of 5)
 LR5-72HGD-xxxM (xxx=540 to 595, in step of 5)
 LR5-72HGD-xxxMc (xxx=560 to 590, in step of 5)
 LR5-72HBD-HD-xxxM (xxx=500 to 565, in step of 5)
 LGi5-72HBD-xxxM (xxx=500 to 565, in step of 5)
 LR5-54HABB-xxxM (xxx=395 to 415, in step of 5)
 LR5-54HIBB-xxxM (xxx=395 to 415, in step of 5)
 LR5-54HABD-xxxM (xxx=395 to 420, in step of 5)
 LR7-72HGD-xxxM (xxx=565 to 635, in step of 5)

CERTIFICATE

No. Z2 099333 0039 Rev. 36

LR5-54HTD-xxxM (xxx=415 to 450, in step of 5)
LGi5-72HTD-xxxM (xxx=550 to 600, in step of 5)
LR5-72HJD-xxxM (xxx=575 to 595, in step of 5)
LR7-72HJD-xxxM (xxx=600 to 655, in step of 5)
LR5-78HGD-xxxM (xxx=610 to 645, in step of 5)
LR5-54HTBB-xxxM (xxx=410 to 435, in step of 5)
LR5-72HTDR-xxxM (xxx=550 to 600, in step of 5)
LR5-54HTDB-xxxM (xxx=395 to 430, in step of 5)
LR8-66HGD-xxxM (xxx=595 to 625, in step of 5)
LR8-48HGD-xxxM (xxx=430 to 455, in step of 5)
LR7-72HTDR-xxxM (xxx=585 to 625, in step of 5)
LR7-66HTDR-xxxM (xxx=535 to 575, in step of 5)
LR7-60HTDR-xxxM (xxx=485 to 525, in step of 5)
LR7-54HTDR-xxxM (xxx=435 to 475, in step of 5)
LR7-72HYD-xxxM (xxx=625 to 660, in step of 5)
LR7-48HGD-xxxM (xxx=385 to 415, in step of 5)
LR7-54HGBB-xxxM (xxx=440 to 460, in step of 5)
LR8-66HYD-xxxM (xxx=625 to 655, in step of 5)
LGi7-72HTD-xxxM (xxx=585 to 625, in step of 5)
xxx stands for rated output power at STC.

Parameters:

Fire Safety Class:	Class A or C according to UL790.
Safety Class:	Class II
Max. System Voltage:	1500V DC
Test Laboratory:	Yangzhou Opto-Electrical Products Testing Institute, No. 10 West Kaifa Road, Yangzhou, 225009 Jiangsu, P. R. China.
Construction:	Frameless or framed, with Junction box, cable and connector.

Tested according to:

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN IEC 61730-1:2018
EN IEC 61730-1:2018/AC:2018-06
EN IEC 61730-2:2018
EN IEC 61730-2:2018/AC:2018-06