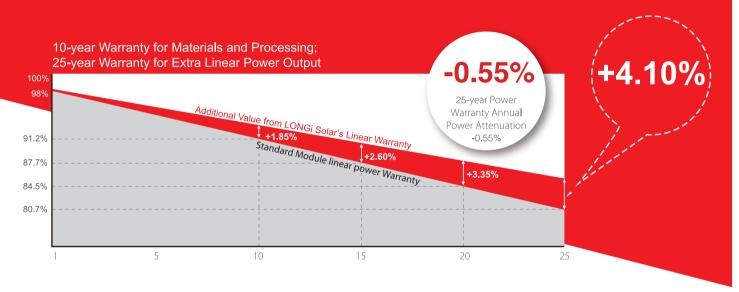


# 1R4-72HPH 425~450M



High Efficiency Low LID Mono PERC with Half-cut Technology



### **Complete System and Product Certifications**

IEC 61215, IEC61730, UL61730

ISO 9001:2008: ISO Quality Management System

ISO 14001: 2004: ISO Environment Management System

TS62941: Guideline for module design qualification and type approval OHSAS 18001: 2007 Occupational Health and Safety







\* Specifications subject to technical changes and tests. LONGi Solar reserves the right of interpretation.

Positive power tolerance (0 ~ +5W) guaranteed

High module conversion efficiency (up to 20.7%)

**Slower power degradation** enabled by Low LID Mono PERC technology: first year <2%, 0.55% year 2-25

**Solid PID resistance** ensured by solar cell process optimization and careful module BOM selection

Reduced resistive loss with lower operating current

Higher energy yield with lower operating temperature

Reduced hot spot risk with optimized electrical design and lower operating current



Note: Due to continuous technical innovation, R&D and improvement, technical data above mentioned may be of modification accordingly. LONGi have the sole right to make such modification at anytime without further notice; Demanding party shall request for the latest datasheet for such as contract need, and make it a consisting and binding part of lawful documentation duly signed by both parties.

## LR4-72HPH **425~450M**

### Design (mm)

# 

### **Mechanical Parameters**

Cell Orientation: 144 (6×24)

Junction Box: IP68, three diodes

Output Cable: 4mm², 300mm in length,

length can be customized

Glass: Single glass

3.2mm coated tempered glass

Frame: Anodized aluminum alloy frame

Weight: 23.5kg

Dimension: 2094×1038×35mm

Packaging: 30pcs per pallet

150pcs per 20'GP

660pcs per 40'HC

### **Operating Parameters**

Operational Temperature: -40  $^{\circ}$ C  $^{\sim}$  +85  $^{\circ}$ C Power Output Tolerance: 0  $^{\sim}$  +5  $^{\circ}$ W

Voc and Isc Tolerance: ±3%

 ${\bf Maximum\ System\ Voltage:\ DC1500V\ (IEC/UL)}$ 

Maximum Series Fuse Rating: 20A

Nominal Operating Cell Temperature: 45±2 °C

Safety Class: Class II
Fire Rating: UL type 1 or 2

<b>Electrical Characteristics</b>									T	est uncert	ainty for Pn	nax: ±3%
Model Number	LR4-72H	PH-425M	LR4-72H	PH-430M	LR4-72H	PH-435M	LR4-72HI	PH-440M	LR4-72H	PH-445M	LR4-72H	PH-450N
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	425	314.8	430	318.5	435	322.2	440	326.0	445	329.7	450	333.4
Open Circuit Voltage (Voc/V)	48.3	45.1	48.5	45.3	48.7	45.5	48.9	45.6	49.1	45.8	49.3	46.0
Short Circuit Current (Isc/A)	11.23	9.06	11.31	9.12	11.39	9.18	11.46	9.24	11.53	9.30	11.60	9.35
Voltage at Maximum Power (Vmp/V)	40.5	37.4	40.7	37.6	40.9	37.8	41.1	38.0	41.3	38.1	41.5	38.3
Current at Maximum Power (Imp/A)	10.50	8.42	10.57	8.47	10.64	8.53	10.71	8.59	10.78	8.64	10.85	8.70
Module Efficiency(%)	19	9.6	19	9.8	20	0.0	20	0.2	20	0.5	2	0.7

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1m/S

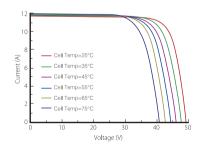
### **Temperature Ratings (STC)**

### **Mechanical Loading**

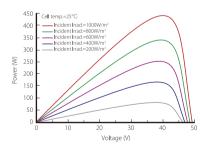
Temperature Coefficient of Isc	+0.057%/°C	Front Side Maximum Static Loading	5400Pa
Temperature Coefficient of Voc	-0.286%/°C	Rear Side Maximum Static Loading	2400Pa
Temperature Coefficient of Pmax	-0.370%/˚C	Hailstone Test	25mm Hailstone at the speed of 23m/s

### **I-V Curve**

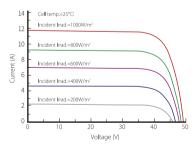
### Current-Voltage Curve (LR4-72HPH-440M)



### Power-Voltage Curve (LR4-72HPH-440M)



### Current-Voltage Curve (LR4-72HPH-440M)





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