

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











LR5-54HTH 415~435M

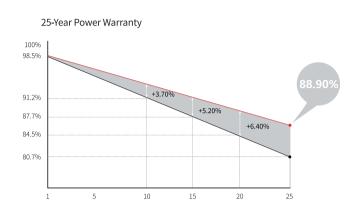
EFFICIENCY

0~3%
POWER
TOLERANCE

<1.5%
FIRST YEAR
POWER DEGRADATION

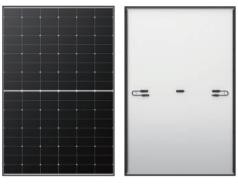
0.40% YEAR 2-25 POWER DEGRADATION

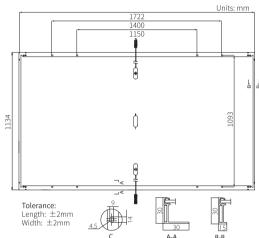
Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)		
Junction Box	IP68, three diodes		
Output Cable	4mm², ±1200mm		
	length can be customized		
Glass	Single glass, 3.2mm coated tempered glass		
Frame	Anodized aluminum alloy frame		
Weight	20.8kg		
Dimension	1722×1134×30mm		
Packaging	36pcs per pallet / 216pcs per 20' GP / 936pcs per 40' HC		





Electrical Characteristics	STC:AM1.	.5 1000W/n	n² 25°C	NOCT : AN	/1.5 800W/	m² 20°C 1	m/s Test	uncertainty for Pr	nax: ±3%	
Module Type	LR5-54F	ITH-415M	LR5-54H	ITH-420M	LR5-54H	TH-425M	LR5-54F	ITH-430M	LR5-54H	TH-435M
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	415	310	420	314	425	318	430	321	435	325
Open Circuit Voltage (Voc/V)	38.53	36.18	38.73	36.36	38.93	36.55	39.13	36.74	39.33	36.93
Short Circuit Current (Isc/A)	13.92	11.24	14.00	11.31	14.07	11.36	14.15	11.43	14.22	11.49
Voltage at Maximum Power (Vmp/V)	32.24	29.42	32.44	29.60	32.64	29.78	32.84	29.97	33.04	30.15
Current at Maximum Power (Imp/A)	12.88	10.54	12.95	10.60	13.03	10.67	13.10	10.72	13.17	10.78
Module Efficiency(%)	2	1.3	2	1.5	21	1.8	2	2.0	22	2.3

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	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C

