Hi-MO 7

LR7-72HGD

595~625M

- High-performance PV modules for utility power plants
- Advanced HPDC cell technology delivers superior module efficiency and power
- High bifaciality and excellent power temperature coefficient achieves high energy yield
- LONGi lifecycle quality ensures long-term performance



12 12-year Warranty for Materials and Processing

30 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

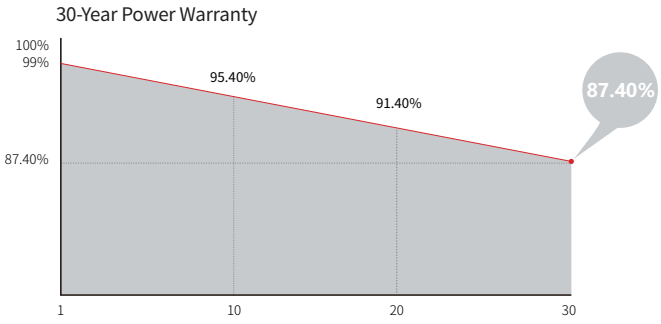
LONGi

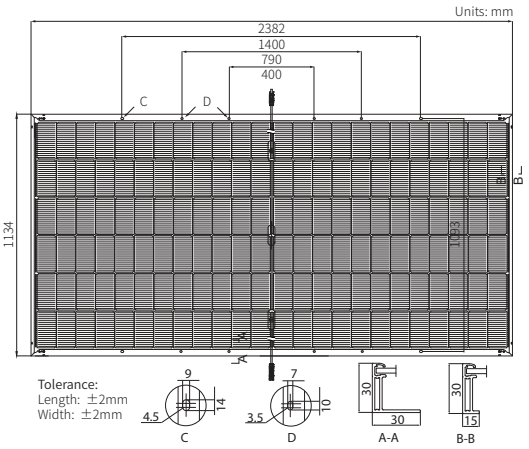
Hi-MO 7

LR7-72HGD 595~625M

23.1%	0~3%	<1%	0.4%	HALF-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	Lower operating temperature

Additional Value





Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes Connector: PV-LR5(LONGi)
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	33.5kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 144pcs per 20' GP / 720pcs per 40' HC

Electrical characteristics with different rear side power gain (reference to 615W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
646	52.66	15.51	44.22	14.60	5%
677	52.66	16.25	44.22	15.30	10%
709	52.76	16.98	44.32	15.99	15%
740	52.76	17.72	44.32	16.69	20%
770	52.76	18.46	44.32	17.38	25%

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	LR7-72HGD-595M		LR7-72HGD-600M		LR7-72HGD-605M		LR7-72HGD-610M		LR7-72HGD-615M		LR7-72HGD-620M		LR7-72HGD-625M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	595	452.9	600	456.7	605	460.6	610	464.4	615	468.2	620	472.0	625	475.8
Open Circuit Voltage (Voc/V)	52.23	49.64	52.34	49.74	52.44	49.84	52.55	49.94	52.66	50.04	52.77	50.15	52.88	50.25
Short Circuit Current (Isc/A)	14.45	11.61	14.53	11.67	14.61	11.74	14.69	11.80	14.77	11.86	14.85	11.92	14.93	11.99
Voltage at Maximum Power (Vmp/V)	43.79	41.63	43.90	41.72	44.00	41.82	44.11	41.92	44.22	42.03	44.33	42.13	44.44	42.23
Current at Maximum Power (Imp/A)	13.59	10.88	13.67	10.95	13.75	11.02	13.83	11.08	13.91	11.14	13.99	11.21	14.07	11.27
Module Efficiency(%)	22.0		22.2		22.4		22.6		22.8		23.0		23.1	

BNPI Electrical Characteristics

BNPI : AM1.5 Front:1000W/m² Back: 135W/m² 25°C Test uncertainty for Pmax: ±3%

Module Type	LR7-72HGD-595M	LR7-72HGD-600M	LR7-72HGD-605M	LR7-72HGD-610M	LR7-72HGD-615M	LR7-72HGD-620M	LR7-72HGD-625M
Testing Condition	BNPI	BNPI	BNPI	BNPI	BNPI	BNPI	BNPI
Maximum Power (Pmax/W)	659	665	670	676	681	687	693
Open Circuit Voltage (Voc/V)	52.23	52.34	52.44	52.55	52.66	52.77	52.88
Short Circuit Current (Isc/A)	16.01	16.10	16.19	16.28	16.36	16.45	16.54
Voltage at Maximum Power (Vmp/V)	43.79	43.90	44.00	44.11	44.22	44.33	44.44
Current at Maximum Power (Imp/A)	15.06	15.14	15.24	15.32	15.41	15.50	15.59
Module Efficiency(%)	24.4	24.6	24.8	25.0	25.2	25.4	25.6

Operating Parameters

Operational Temperature	-40°C ~ +40°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	ϕPmax: 80±5% ϕVoc: 98±5% ϕIsc: 80±5%
Fire Rating	UL type 29 IEC Class C
Power Test Tolerance:	±3%

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	+0.045%/°C
Temperature Coefficient of Voc	-0.230%/°C
Temperature Coefficient of Pmax	-0.280%/°C

LONGi

LONGi Green Energy Technology Co., Ltd.

Web: www.longi.com

Made in China or Vietnam or Malaysia

Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (20250422V1.1)