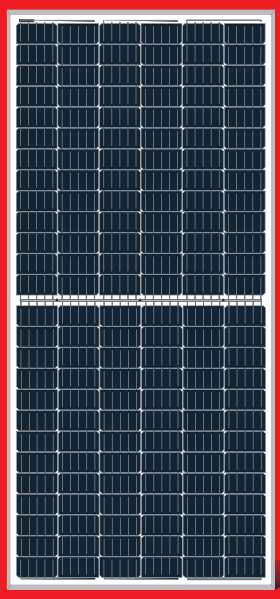
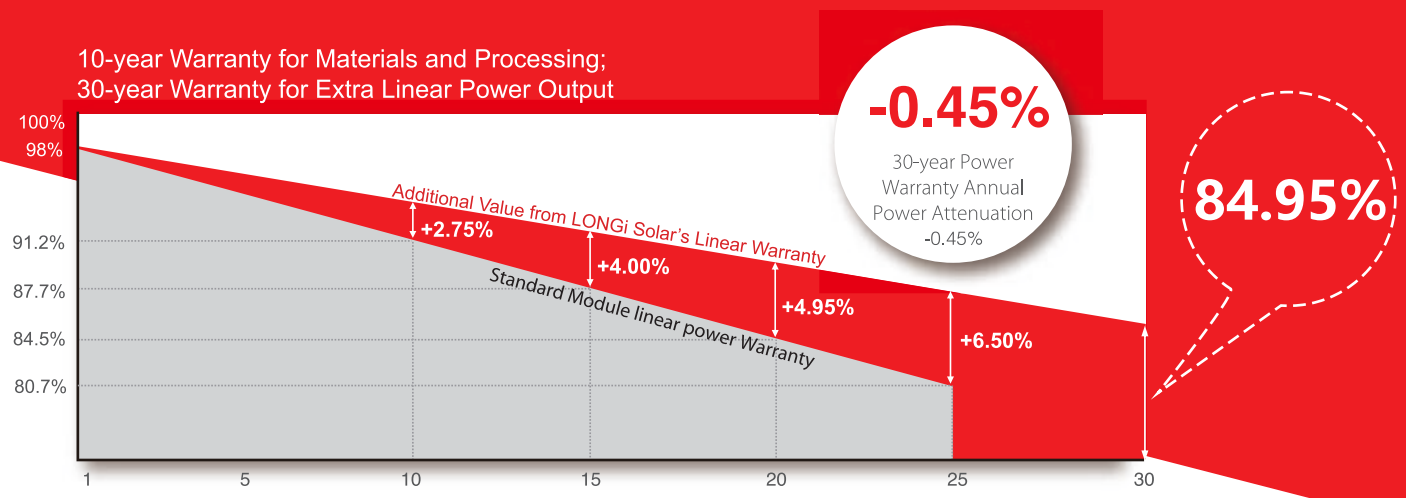
LR6-78HBD
390~420M

High Efficiency Low LID Bifacial PERC with Half-cut Technology



10-year Warranty for Materials and Processing;
30-year Warranty for Extra Linear Power Output



Complete System and Product Certifications

IEC 61215, IEC61730, UL1703

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.

Front side performance equivalent to conventional low LID mono PERC:
- High module conversion efficiency (up to 19.3%)
- Better energy yield with excellent low irradiance performance and temperature coefficient
- First year power degradation <2%

Bifacial technology enables additional energy harvesting from rear side (up to 25%)

Glass/glass lamination ensures 30 year product lifetime, with annual power degradation < 0.45%, 1500V compatible to reduce BOS cost

40mm frame design enables easy installation and robust mechanical strength

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

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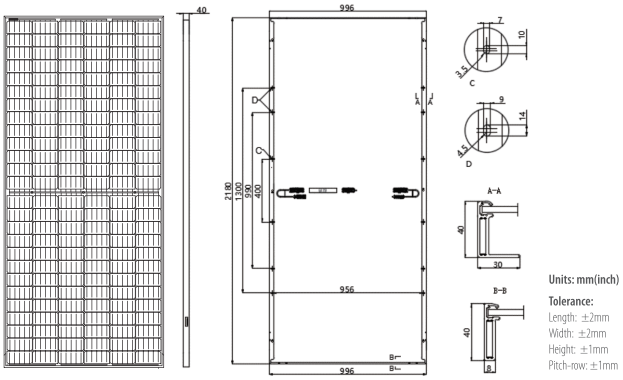
LR6-78HBD 390~420M

Design （mm）



Mechanical Parameters

Cell Orientation: 156（6×26）

Junction Box: IP67, three diodes

Output Cable: 4mm², 300mm in length, length can be customized

Glass: Dual glass 2.0mm coated tempered glass

Frame: Anodized aluminum alloy frame

Weight: 29.0kg

Dimension: 2180×996×40mm

Packaging: 26pcs per pallet

130pcs per 20'GP

520pcs per 40'HC

Operating Parameters

Operational Temperature: -40℃~+85℃

Power Output Tolerance: 0~+5 W

Voc and Isc Tolerance: ±3%

Maximum System Voltage: DC1500V (IEC/UL)

Maximum Series Fuse Rating: 20A

Nominal Operating Cell Temperature: 45±2℃

Safety Class: Class Ⅱ

Fire Rating: UL type 3

Bifaciality: ≥75%

Electrical Characteristics

Test uncertainty for Pmax: ±3%

Model Number	LR6-78HBD-390M		LR6-78HBD-395M		LR6-78HBD-400M		LR6-78HBD-405M		LR6-78HBD-410M		LR6-78HBD-415M		LR6-78HBD-420M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	390	290.0	395	293.7	400	297.4	405	301.1	410	304.9	415	308.6	420	312.3
Open Circuit Voltage (Voc/V)	51.9	48.4	52.1	48.6	52.4	48.8	52.6	49.0	52.8	49.2	53.0	49.4	53.2	49.6
Short Circuit Current (Isc/A)	9.74	7.89	9.82	7.95	9.88	8.00	9.95	8.06	10.02	8.11	10.10	8.18	10.18	8.24
Voltage at Maximum Power (Vmp/V)	43.4	40.3	43.6	40.5	43.8	40.7	44.0	40.8	44.2	41.0	44.4	41.2	44.6	41.4
Current at Maximum Power (Imp/A)	8.99	7.20	9.06	7.26	9.14	7.32	9.21	7.38	9.29	7.44	9.35	7.49	9.42	7.54
Module Efficiency(%)	18.0		18.2		18.4		18.7		18.9		19.1		19.3	

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

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

Electrical characteristics with different rear side power gain (reference to 400W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
420	52.4	10.37	43.8	9.60	5%
440	52.4	10.87	43.8	10.05	10%
460	52.5	11.36	43.9	10.51	15%
480	52.5	11.86	43.9	10.97	20%
500	52.5	12.35	43.9	11.43	25%

Temperature Ratings（STC）

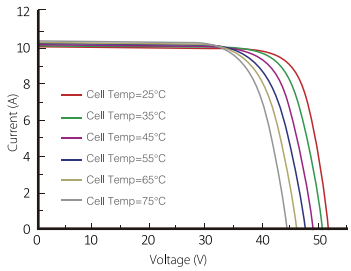
Temperature Coefficient of Isc	+0.060%/℃
Temperature Coefficient of Voc	-0.300%/℃
Temperature Coefficient of Pmax	-0.370%/℃

Mechanical Loading

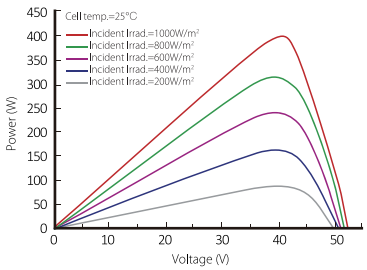
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

I-V Curve

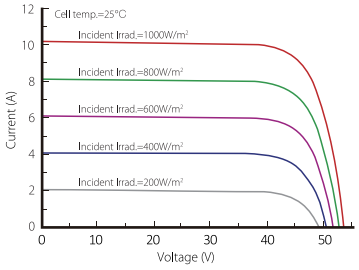
Current-Voltage Curve (LR6-78HBD-400M)



Power-Voltage Curve (LR6-78HBD-400M)



Current-Voltage Curve (LR6-78HBD-400M)



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