

LONGi EcoLife

LR7-54HJD

495~510M (250 W/m^2)

THE **smarter**
AWARD 



Haut
Efficacité

Dirigeant
Module noir
Efficacité



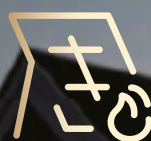
Anti
Ombrage

70%
Sortie maintenue
lorsqu'il est ombragé



Charge
6000/3600Pa

Haut
Vent
Résistance



Prévenir
Surchauffe

60 °C ET PLUS
Température plus basse
à l'ombre



25 %

EFFICACITÉ MAXIMALE
DU MODULE

0~3%

TOLÉRANCE DE
PERFORMANCE

1 %

DÉGRADATION DE
PERFORMANCE LA PREMIÈRE ANNÉE

0.35 %

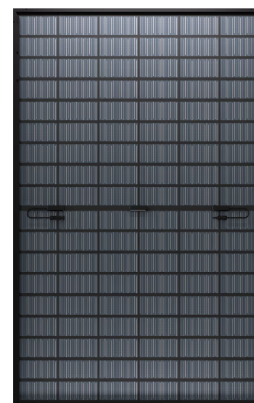
DÉGRADATION DE
PERFORMANCE ANNÉES 2-30

BC-CELL

TEMPÉRATURE DE
FONCTIONNEMENT BASSE

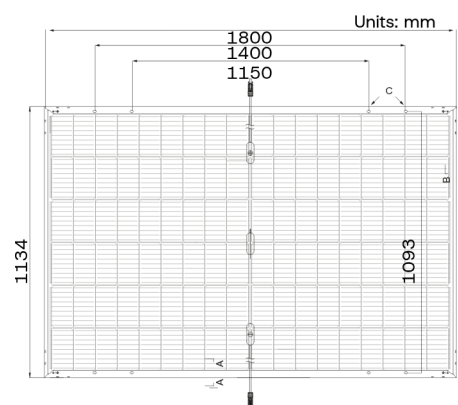
Paramètres mécaniques

Orientation des cellules	108 (6×18)
Boîtier de jonction	IP68
Câble de sortie	4mm ² , +400, -200mm/±1200mm length can be customized
Verre	Verre double, verre trempé revêtu de 2,0 mm + verre semi-trempé de 1,6 mm
Cadre	Cadre en alliage d'aluminium anodisé noir
Poids	23.5 kg
Dimension	1800×1134×30mm
Emballage	36 un. par palette / 216 un. par 20' GP / 864 un. par 40' HC

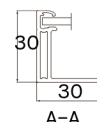
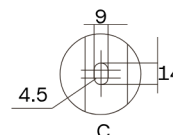


Caractéristiques électriques avec différents gains de puissance en face arrière

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
530.0	41.45	16.18	34.27	15.47	0.05
556.0	41.45	16.95	34.27	16.21	0.1
581.0	41.55	17.72	34.37	16.9	0.15
606.0	41.55	18.49	34.37	17.63	0.2
631.0	41.55	19.26	34.37	18.37	0.25



Tolerance:
Length: ±2mm
Width: ±2mm



Caractéristiques électriques

STC : AM1.5 1000W/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/s

Incertitude de mesure pour Pmax
± 3%

Type de module	LR7-54HJD-495M	LR7-54HJD-500M	LR7-54HJD-505M	LR7-54HJD-510M
Condition de test	STC	STC	STC	STC
Puissance maximale (Pmax/W)	495.0	500.0	505.0	510.0
Tension en circuit ouvert (Voc/V)	41.25	41.35	41.45	41.55
Courant de court-circuit (Isc/A)	15.19	15.3	15.41	15.52
Tension à puissance maximale (Vmp/V)	34.07	34.17	34.27	34.37
Courant à puissance maximale (Imp/A)	14.53	14.63	14.74	14.84
Efficacité du module (%)	24.3	24.5	24.7	25.0

Paramètres de fonctionnement

Température de fonctionnement	-40°C ~ +85°C
Tolérance de puissance de sortie	0 ~ 3%
Tension système maximale	DC1500V (IEC)
Courant nominal maximal du fusible série	30A
Température de fonctionnement nominale de la cellule	45±2°C
Indice de protection	Classe II
Classe de protection incendie	IEC Class A

Charge mécanique

Front Side Maximum Static Loading	6000Pa
Charge statique maximale côté dos	3600Pa
Test de grêle	Grêlon de 25 mm à une vitesse de 23 m/s

Valeurs de température (TCN)

Coefficient de température de l'Isc	+0.050%/°C
Coefficient de température du Voc	-0.200%/°C
Coefficient de température du Pmax	-0.240%/°C



LR7-54HJD(Dual Glass)

495~510M (250_{W/m²})

First Choice For High-End Residential

- ▶ **Ultimate Efficiency, 25%+**
- ▶ **More Power Generation**
Exclusive HBC technology, higher power generation in all scenarios
- ▶ **Longer Module Life**
Butyl rubber seals for better water resistance
- ▶ **Enhanced Safety Function**
Optimized Anti-Shading and Prevent Localized Overheating
- ▶ **Higher Hurricanes and Snow Resistance**
Enhanced Mechanical Load: 6000Pa/3600Pa
- ▶ **Low Carbon and Environmentally Friendly**
Low carbon for the whole lifecycle,
more environmentally friendly

Complete System and Product Certifications

IEC61215, IEC 61730

ISO9001: Quality Management System

ISO14001: Environment Management System

ISO45001: Occupational Health and Safety Management System

IEC62941: Quality System for PV Module Manufacturing

30

30-Year Warranty for
Materials and Processing

30

30-Year Warranty for Extra
Linear Power Output



Residential PV Modules, Choose BC

LR7-54HJD 495~510M

25.0%
MAX MODULE
EFFICIENCY

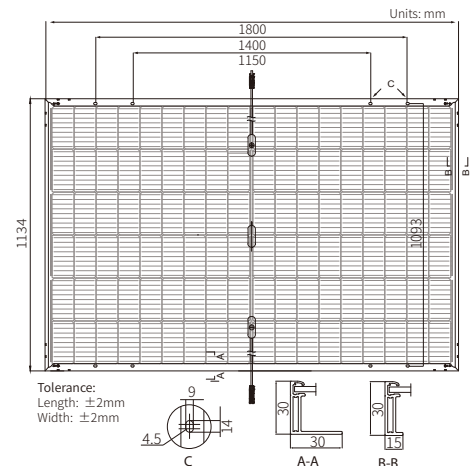
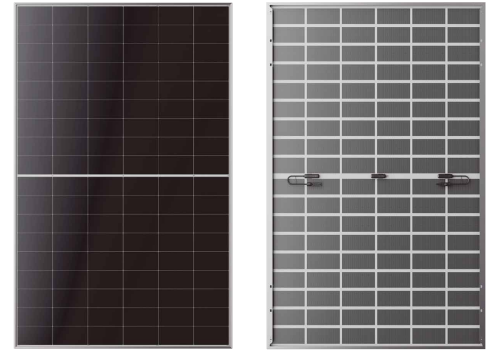
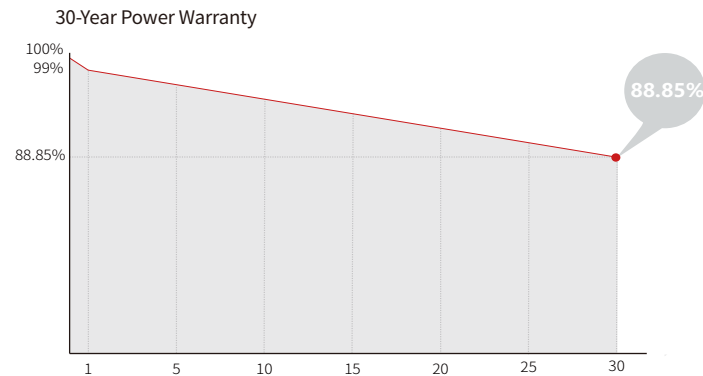
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm ² , +400, -200mm/±1200mm length can be customized
Glass	Double glass 2.0mm semi-tempered glass+1.6mm semi-tempered glass
Frame	Black anodized aluminum alloy frame
Weight	23.5kg
Dimension	1800×1134×30mm
Packaging	36pcs per pallet / 216pcs per 20' GP / 864pcs 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: $\pm 3\%$

Module Type	LR7-54HJD-495M		LR7-54HJD-500M		LR7-54HJD-505M		LR7-54HJD-510M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	495	377	500	380	505	384	510	388
Open Circuit Voltage (Voc/V)	41.25	39.21	41.35	39.30	41.45	39.40	41.55	39.49
Short Circuit Current (Isc/A)	15.19	12.20	15.30	12.29	15.41	12.38	15.52	12.46
Voltage at Maximum Power (Vmp/V)	34.07	32.37	34.17	32.47	34.27	32.56	34.37	32.66
Current at Maximum Power (Imp/A)	14.53	11.64	14.63	11.72	14.74	11.80	14.84	11.89
Module Efficiency(%)	24.3		24.5		24.7		25.0	

Electrical characteristics with different rear side power gain (reference to 505W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
530	41.45	16.18	34.27	15.47	5%
556	41.45	16.95	34.27	16.21	10%
581	41.55	17.72	34.37	16.90	15%
606	41.55	18.49	34.37	17.63	20%
631	41.55	19.26	34.37	18.37	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	6000Pa
Rear Side Maximum Static Loading	3600Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.210%/°C
Temperature Coefficient of Pmax	-0.240%/°C



Specifications included in this datasheet are subject to change without notice.
LONGi reserves the right of final interpretation. (BGV02 20250423)