

LONGi EcoLife

LR7-54HVBB

THE **smarter**
AWARD 

470~485M (238 W/m^2)



Haut
Efficacité

Dirigeant

Module noir
Efficacité



Anti
Ombrage

70%

Sortie maintenue
lorsqu'il est ombragé



Film POE

Haut

Corrosion
Résistance

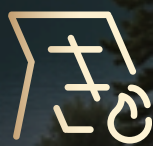


Classe A

Le plus élevé

Sécurité incendie
Rapport

Classe de résistance au feu



Prévenir
la Surchauffe

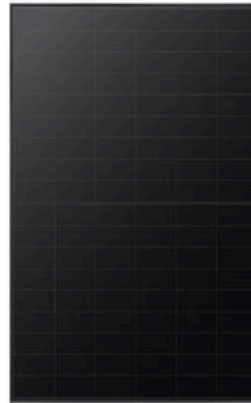
60°C

Température plus basse à
l'ombre (empêche la
surchauffe).

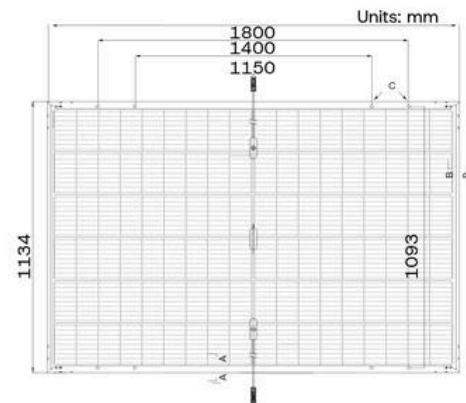


23.8 %EFFICACITÉ MAXIMALE
DU MODULE**0~3%**TOLÉRANCE DE
PERFORMANCE**1 %**DÉGRADATION DE
PERFORMANCE LA PREMIÈRE ANNÉE**0.35 %**DÉGRADATION DE
PERFORMANCE ANNÉES 2-30**BC-CELL**TEMPÉRATURE DE
FONCTIONNEMENT BASSE**Paramètres mécaniques**

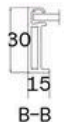
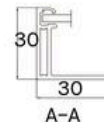
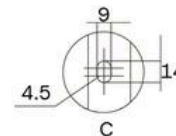
Orientation des cellules	108 (6×18)
Boîtier de jonction	IP68
Câble de sortie	4mm ² , +400, -200mm/±1200mm length can be customized
Verre	Double verre, verre trempé revêtu de 2,0 mm + verre semi-trempé de 1,6 mm
Cadre	Cadre en alliage d'aluminium anodisé noir
Poids	23.5 kg
Dimension	1800×1134×30mm
Emballage	37 pièces par palette / 222 pièces par 20'GP / 888 pièces 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
494.0	40.31	15.52	33.29	14.82	0.05
517.0	40.31	16.26	33.29	15.53	0.1
541.0	40.41	17.0	33.39	16.19	0.15
564.0	40.41	17.74	33.39	16.89	0.2
588.0	40.41	18.48	33.39	17.6	0.25



Tolerance:
Length: ±2mm
Width: ±2mm

**Caractéristiques électriques**STC : AM1.5 1000W/m² 25°C NOCT : AM1.5 800W/m² 20°C 1m/sIncertitude de mesure pour Pmax
± 3%

Type de module	LR7-54HVBB-470M	LR7-54HVBB-475M	LR7-54HVBB-480M	LR7-54HVBB-485M
Condition de test	STC	STC	STC	STC
Puissance maximale (Pmax/W)	470.0	475.0	480.0	485.0
Tension en circuit ouvert (Voc/V)	40.31	40.42	40.53	40.64
Courant de court-circuit (Isc/A)	14.78	14.88	14.98	15.08
Tension à puissance maximale (Vmp/V)	33.29	33.4	33.51	33.62
Courant à puissance maximale (Imp/A)	14.13	14.23	14.33	14.43
Efficacité du module (%)	23.0	23.3	23.5	23.8

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 C

Charge mécanique

Front Side Maximum Static Loading	5400Pa
Charge statique maximale côté dos	2400Pa
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	-0.260%/°C

LONGi EcoLife

LR7-54HVBB(Dual Glass)

470~485M (23.8_{W/m²})

First Choice For High-End Residential

▸ **Extreme Efficiency, 23.8%+**

▸ **High Power Generation**

Leading HPBC2.0 technology, more power generation under the same area

▸ **Low Carbon and Environmentally Friendly**

Low carbon for the whole lifecycle process, more environmentally friendly

▸ **Safety Function**

Anti-Shading and Prevent Localized Overheating

▸ **Pure Black Appearance**

No gridlines, low glare

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

LR7-54HVBB 470~485M

23.8%
MAX MODULE
EFFICIENCY

0~3%
POWER
TOLERANCE

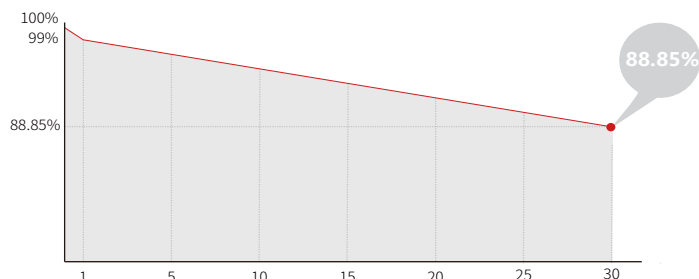
<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

BC-CELL
LOWER OPERATING
TEMPERATURE

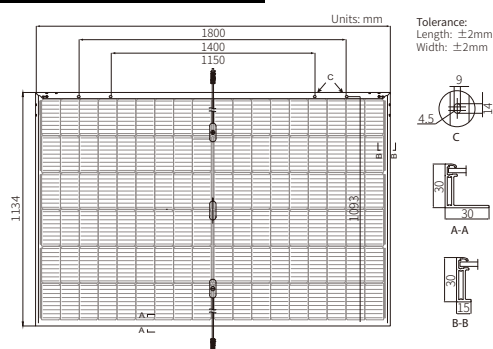
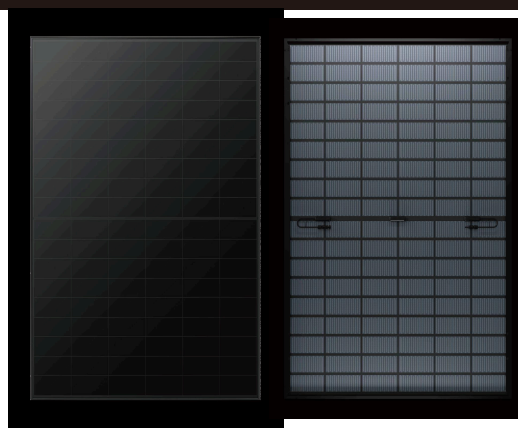
Additional Value

30-Year Power Warranty



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: ±3%

Module Type	LR7-54HVBB-470M		LR7-54HVBB-475M		LR7-54HVBB-480M		LR7-54HVBB-485M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	470	357	475	361	480	365	485	369
Open Circuit Voltage (Voc/V)	40.31	38.28	40.42	38.39	40.53	38.50	40.64	38.61
Short Circuit Current (Isc/A)	14.78	11.84	14.88	11.93	14.98	12.02	15.08	12.10
Voltage at Maximum Power (Vmp/V)	33.29	31.6	33.40	31.71	33.51	31.82	33.62	31.93
Current at Maximum Power (Imp/A)	14.13	11.3	14.23	11.39	14.33	11.48	14.43	11.56
Module Efficiency(%)	23.0		23.3		23.5		23.8	

Electrical characteristics with different rear side power gain (reference to 470W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
494	40.31	15.52	33.29	14.82	5%
517	40.31	16.26	33.29	15.53	10%
541	40.41	17.00	33.39	16.19	15%
564	40.41	17.74	33.39	16.89	20%
588	40.41	18.48	33.39	17.60	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	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	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C

LONGI

Specifications included in this datasheet are subject to change without notice.
LONGI reserves the right of final interpretation. (BGV02 20250427)