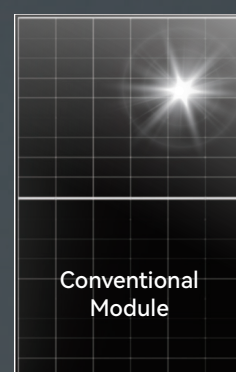


LONGi EcoLife Anti-Glare

LR7-54HVB

470~490M

**Aviation-Grade Anti-Glare,
High Power Performance**



Aviation Glare Compliant

Gridline-free BC + Low-Reflection Glass for Dual Glare Reduction
Max Luminance Under 20000cd/m² Aviation Limit*
Certified by TÜV Rheinland



High Efficiency & High Power

Powered by HPBC 2.0 Technology
Anti-Shading Design* Minimizes Power Loss
Higher Power Generation, Greater Returns



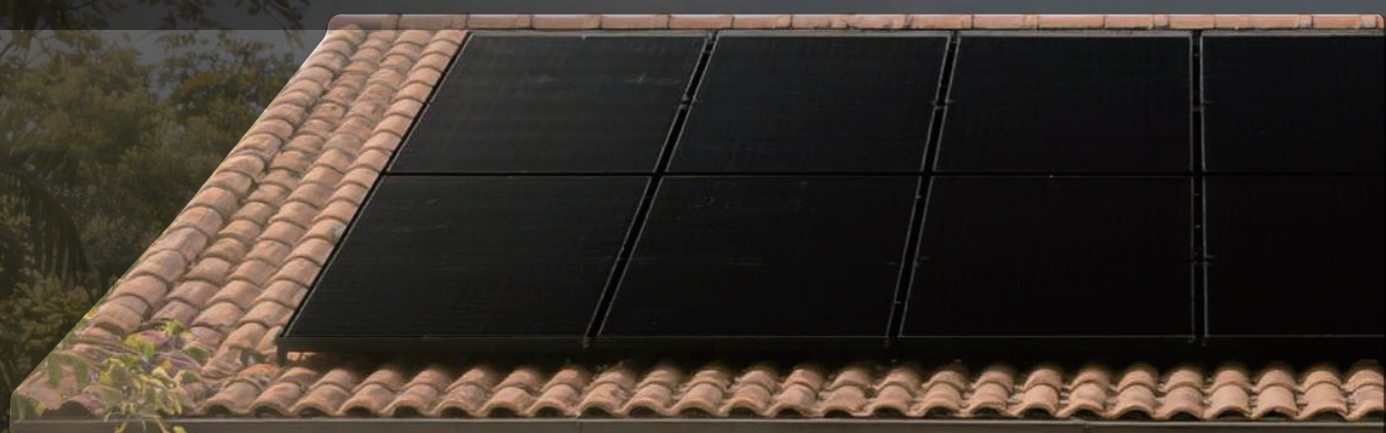
Aesthetic

HPBC, A Natural Beauty. No Gridlines, Minimalist Elegance.



Reliable Safety

Weak Conduction Avoids Overheating, Shaded Temp Drops 60°C* Against Conventional Modules.



24.01%

MAX MODULE
EFFICIENCY

1%

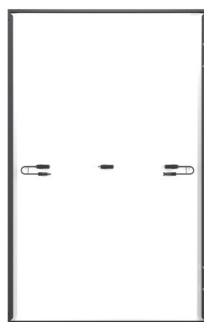
FIRST YEAR
POWER DEGRADATION

0.35%

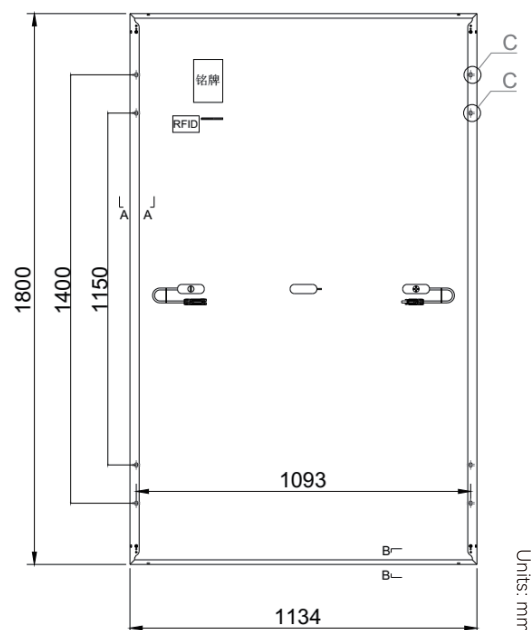
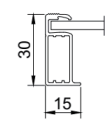
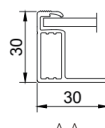
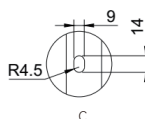
YEAR 2-30
POWER DEGRADATION

-0.26%/°C

BETTER TEMPERATUR
COEFFICIENT



Tolerance:
Length: $\pm 2\text{mm}$
Width: $\pm 2\text{mm}$



Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68, three diodes
Output Cable	4mm ² ; +400/-200mm/±1200mm length can be customized
Glass	Single glass, Anti-glare 3.2mm coated tempered glass
Frame	Black anodized aluminum alloy frame
Weight	21.6 kg
Dimension	1800×1134×30mm
Packaging	37pcs per pallet / 222pcs per 20'GP / 888pcs per 40'HC

Remark: 17.5m trucks are rated at 30t load. Actual loading quantity is subject to vehicle specs.

Electrical Characteristics

·STC: Irradiance 1000W/m², Cell Temperature 25°C, AM1.5 (Test uncertainty for Pmax: ±3%)

Module Type	LR7-54HVB-470M	LR7-54HVB-475M	LR7-54HVB-480M	LR7-54HVB-485M	LR7-54HVB-490M
Testing Condition	STC	STC	STC	STC	STC
Maximum Power (P _{max} /W)	470	475	480	485	490
Open Circuit Voltage (V _{oc} /V)	40.07	40.18	40.29	40.40	40.52
Short Circuit Current (I _{sc} /A)	14.93	15.03	15.13	15.23	15.33
Voltage at Maximum Power (V _{mp} /V)	33.05	33.16	33.28	33.40	33.51
Current at Maximum Power (I _{mp} /A)	14.23	14.33	14.43	14.53	14.63
Module Efficiency (%)	23.03	23.27	23.52	23.76	24.01

Operating Parameters

Module [T98] Max	70°C
Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0~3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	IEC Class C

Mechanical Loading

Min Designed Mechanical Load	1600Pa/1600Pa
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 I _{sc}	+0.050%/°C
Temperature Coefficient of V _{oc}	-0.200%/°C
Temperature Coefficient of P _{max}	-0.260%/°C

1.Data source: TTÜV CN264/JPI001 Anti-Glare Performance Evaluation.Test data may vary due to differences in tested modules and institutions.

2.Data Source: TÜV CN250XRQ 001 Shadow Shading Test Report. Anti-shading effect varies due to differences in test irradiation conditions, temperature, and tested modules.

3.Data Source: IEC 61215-2:2021, MQT 09 Hot Spot Test. A comparison was made between the test temperatures of HI-MO X10 and conventional modules. Test data may vary due to differences in tested modules and institutions.

Specifications included in this datasheet are subject to change without notice.LONGi reserves the right of final interpretation. (BGV03 20260818)