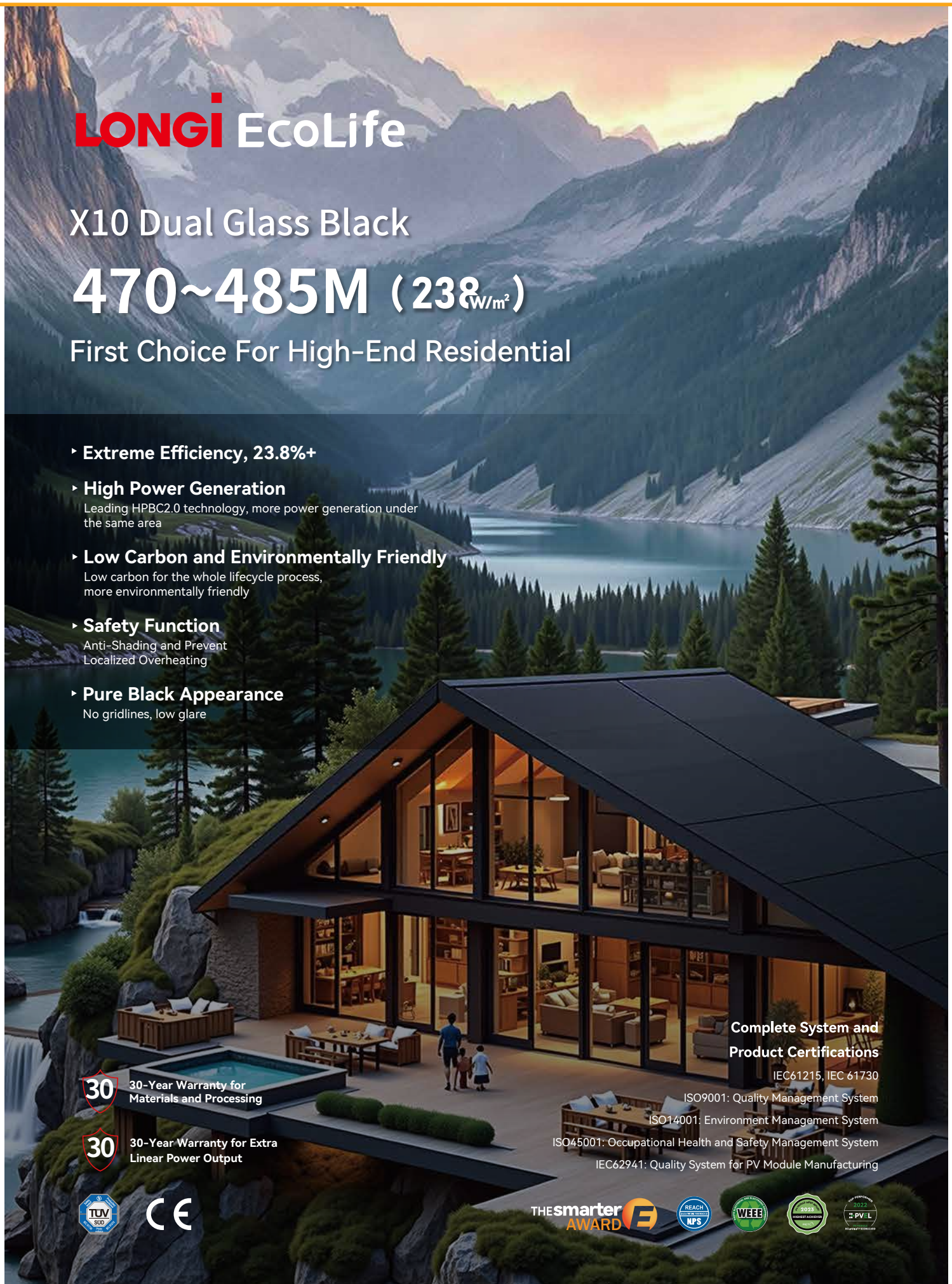
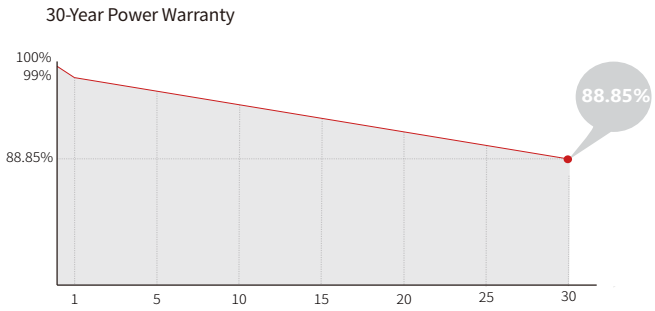

LONGi EcoLife
X10 Dual Glass Black
470~485M（238W/m²）
First Choice For High-End Residential
Extreme Efficiency, 23.8%+
High Power Generation
Leading HPBC2.0 technology, more power generation under the same area
Low Carbon and Environmentally Friendly
Low carbon for the whole lifecycle process, more environmentally friendly
Safety Function
Anti-Shading and Prevent Localized Overheating
Pure Black Appearance
No gridlines, low glare
30
30-Year Warranty for Materials and Processing
30
30-Year Warranty for Extra Linear Power Output
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
THE smarter E AWARD

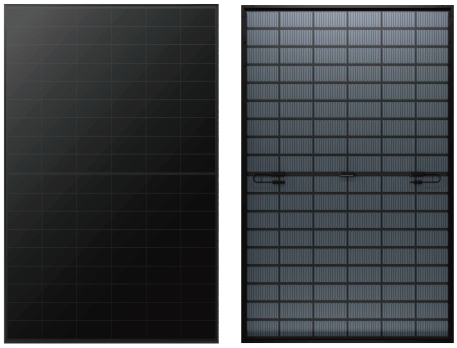
Residential PV Modules, Choose BC

LR7-54HVBB 470~485M

23.8%	0~3%	<1%	0.35%	BC-CELL
MAX MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR POWER DEGRADATION	YEAR 2-30 POWER DEGRADATION	LOWER OPERATING TEMPERATURE

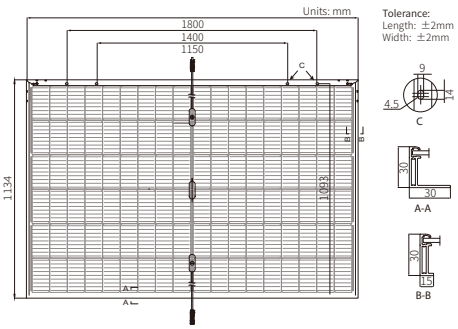
Additional Value





Mechanical Parameters

Cell Orientation	108 (6×18)
Junction Box	IP68
Output Cable	4mm², +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. (BGV03 20250625)