

Gokin

TOPCon Bifacial Module with Dual Glass GK-4-66HTBD-F | Half-cut | 132cells

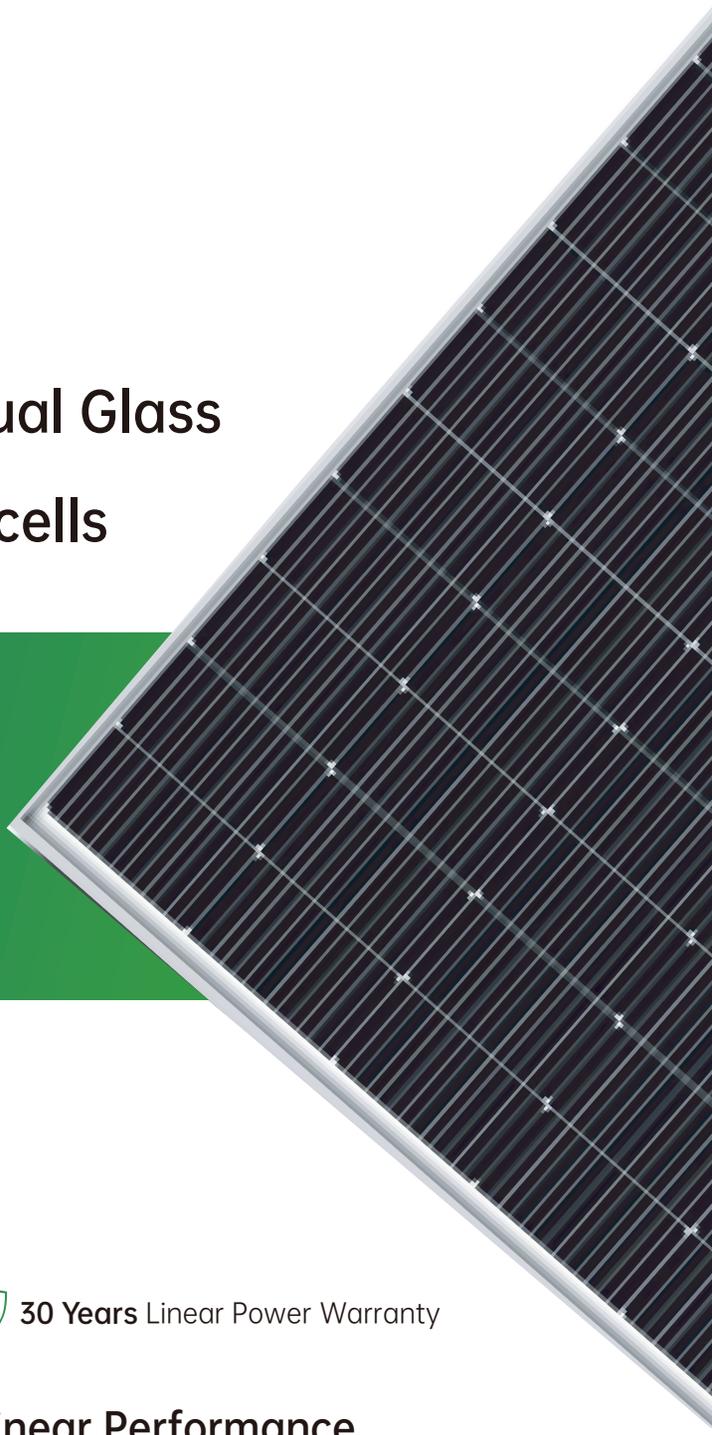
590-620W

23.0%

Module Efficiency up to

≤1% First-year Degradation

≤0.4% Annual Degradation



High Efficiency

Module efficiency up to 23.0% based on N-Type wafer and TOPCon technology



Anti-degradation

Unsusceptible to LID, LeTID and less annual degradation due to special characteristics of N-Type



Excellent Energy Yield

More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality



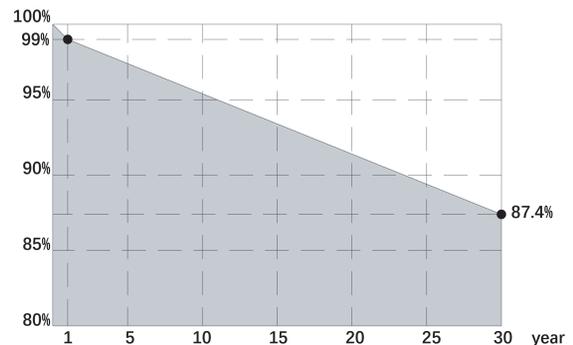
Quality Guarantee

High module quality ensures long-term reliability



30 Years Linear Power Warranty

Linear Performance Warranty



At least 99% of nominal power during first year ;
Thereafter max.0.4% degradation per year ;
At least 87.4% of nominal power up to 30 years.



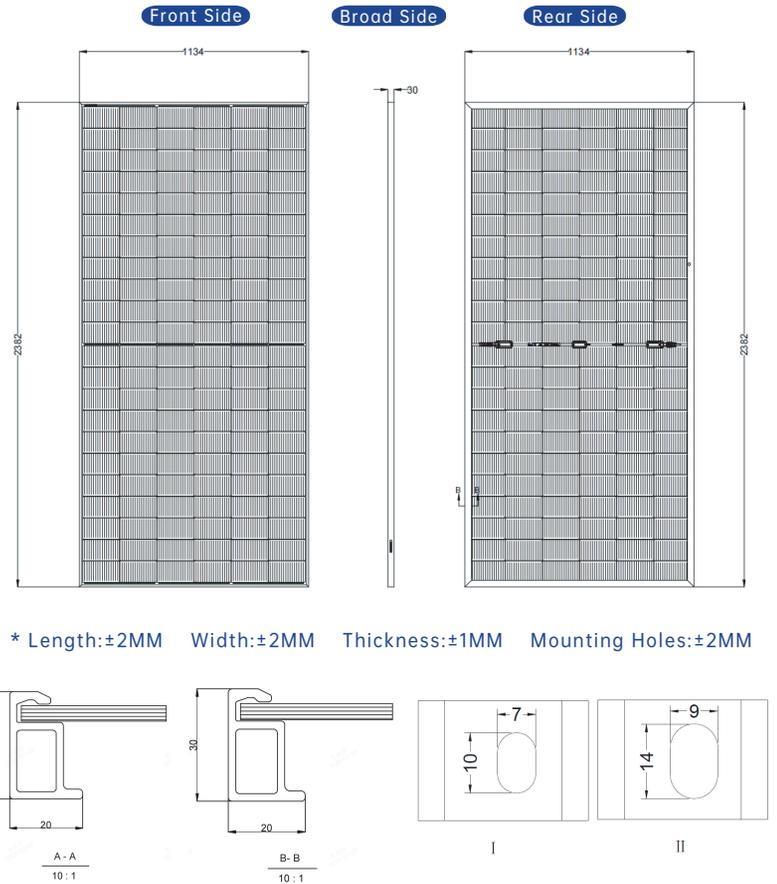
IEC 61215(2021) / IEC 61730(2023)
ISO 9001: 2015: ISO Quality Management System
Anti-PID / Ammonia / Salt-mist / Dust and sand

- Operating Temperature $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Power Tolerance $0 \sim +5\text{W}$
- Junction Box **IP68**
- NOCT $45 \pm 2^{\circ}\text{C}$
- Maximum Series Fuse Rating **35A**
- Bifacial Factor $80 \pm 5\%$
- Maximum System Voltage **1500V(IEC)**

Mechanical Parameters

Cell Type	TOPCon
No. of cells	132 (2×66)
Output Cables	TüV 1×4mm ²
	(+)300mm,(-)200mm in length or customized length
Glass	Front: 2.0mm, AR-coating, semi-tempered
	Rear: 2.0mm, semi-tempered
Frame	Fiberglass
Weight	33.0 kg (72.75 lbs)
Dimension	2382×1134×30mm
Packaging	37 pcs per pallet
	148 pcs per 20' HC, 740 pcs per 40' HC
Protection Class	Class II

Engineering Drawings



Electrical Characteristics (STC Test)

Module Type	GK-4-66HTBD-590M-F		GK-4-66HTBD-595M-F		GK-4-66HTBD-600M-F		GK-4-66HTBD-605M-F		GK-4-66HTBD-610M-F		GK-4-66HTBD-615M-F		GK-4-66HTBD-620M-F	
	STC	NOCT												
Testing Condition	STC	NOCT												
Maximum Power (Pmax/W)	590	447	595	450	600	454	605	458	610	462	615	466	620	469
Open-circuit Voltage (Voc/V)	47.32	44.81	47.49	44.96	47.66	45.16	47.83	45.28	48.00	45.49	48.17	45.65	48.34	45.81
Short-circuit Current (Isc/A)	15.79	12.73	15.86	12.80	15.93	12.86	16.00	12.92	16.07	12.96	16.14	13.02	16.21	13.16
Maximum Power Voltage (Vmp/V)	39.67	37.55	39.81	37.65	39.95	37.78	40.09	37.91	40.22	38.06	40.35	38.16	40.48	38.31
Maximum Power Current (Imp/A)	14.88	11.90	14.96	11.97	15.03	12.03	15.10	12.08	15.18	12.16	15.25	12.20	15.33	12.27
Module Efficiency (%)	21.8		22.0		22.2		22.4		22.6		22.8		23.0	

1. STC: Irradiance 1000W/M², Cell Temperature 25°C, AM=1.5
2. NOCT: Irradiance 800W/M², Ambient Temperature 20°C, AM=1.5, Wind Speed 1M/S

Different Rearside Power Gain (Reference to 605W)

Rearside Power Gain	5%	10%	20%
Maximum Power at STC (Pmax)	635.3	665.5	726.0
Open-circuit Voltage (Voc/V)	47.8	47.8	47.8
Short-circuit Current (Isc/A)	16.8	17.6	19.2
Maximum Power Voltage (Vmp/V)	40.1	40.1	40.1
Maximum Power Current (Imp/A)	15.9	16.6	18.1
Module Efficiency (%)	23.5	24.6	26.9

Temperature Ratings (STC)

Temperature coefficient of Isc	+0.045%/°C
Temperature coefficient of Voc	-0.25%/°C
Temperature coefficient of Pmax	-0.29%/°C

Mechanical Loading

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

