

Gokin

TOPCon Bifacial Module with Dual Glass

GK-1-72HTBD | Half-cut | 144cells

570-600W

23.2%

Module Efficiency up to

≤1% First-year Degradation

≤0.4% Annual Degradation



High Efficiency

Module efficiency up to 23.2% 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

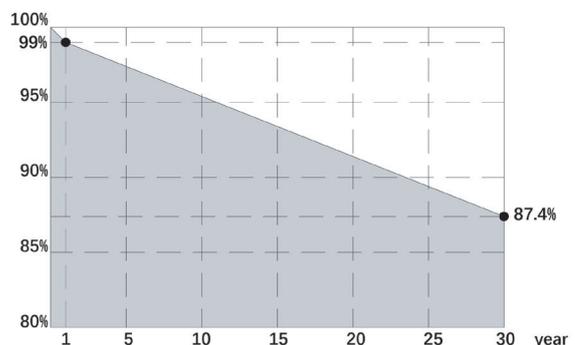


15 Years Product Warranty



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.



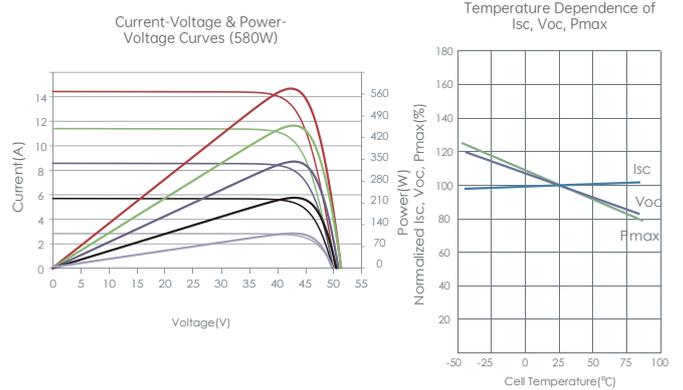
IEC 61215(2021) / IEC 61730(2023)
ISO 9001: 2015: ISO Quality Management System
Anti-PID / Ammonia / Salt-mist / Dust and sand

- Operating Temperature **-40°C ~ +85°C**
- Power Tolerance **0~+5W**
- Junction Box **IP68**
- NOCT **45±2°C**
- Maximum Series Fuse Rating **30A**
- Bifacial Factor **80±5%**
- Maximum System Voltage **1500V(IEC)**

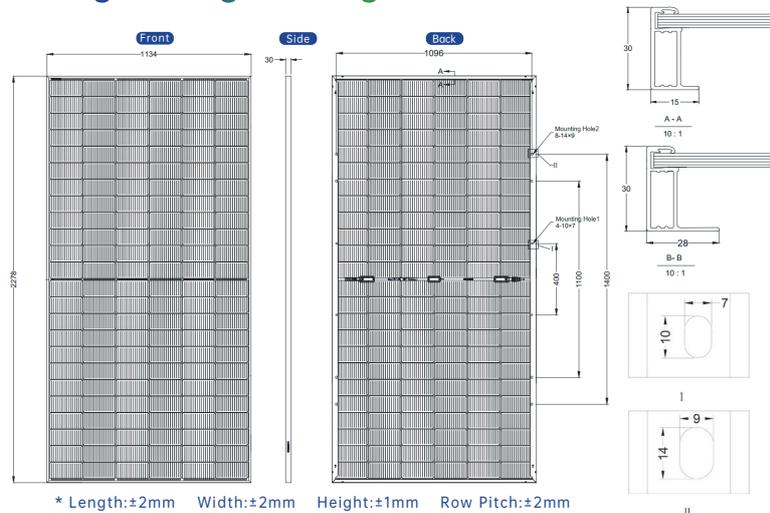
Mechanical Parameters

Cell Type	TOPCon
No. of cells	144 (2×72)
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	Anodized aluminum alloy frame
Weight	31.0 kg (68.34 lbs)
Dimension	2278×1134×30mm
Packaging	37 pcs per pallet
	Package size(mm): 2310×1130×1259
	148 pcs per 20' HC, 740 pcs per 40' HC
Protection Class	Class II

Electrical Performance



Engineering Drawings



Electrical Characteristics (STC Test)

Module Type	GK-1-72HTBD-570M		GK-1-72HTBD-575M		GK-1-72HTBD-580M		GK-1-72HTBD-585M		GK-1-72HTBD-590M		GK-1-72HTBD-595M		GK-1-72HTBD-600M	
	STC	NOCT												
Maximum Power (Pmax/W)	570	430	575	434	580	438	585	442	590	446	595	450	600	454
Open-circuit Voltage (Voc/V)	51.07	48.35	51.27	48.56	51.47	48.73	51.67	48.92	51.87	49.12	52.07	49.26	52.27	49.44
Short-circuit Current (Isc/A)	14.25	11.49	14.31	11.54	14.37	11.59	14.43	11.64	14.49	11.69	14.55	11.74	14.61	11.79
Maximum Power Voltage (Vmp/V)	42.29	40.01	42.44	40.14	42.59	40.30	42.74	40.45	42.89	40.58	43.04	40.72	43.19	40.86
Maximum Power Current (Imp/A)	13.48	10.75	13.55	10.81	13.62	10.87	13.69	10.93	13.76	10.99	13.83	11.06	13.90	11.12
Module Efficiency (%)	22.1		22.3		22.5		22.6		22.8		23.0		23.2	

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 585W)

Rearside Power Gain	5%	10%	20%
Maximum Power at STC (Pmax)	614.3	643.5	702.0
Open-circuit Voltage (Voc/V)	51.7	51.7	51.7
Short-circuit Current (Isc/A)	15.2	15.9	17.3
Maximum Power Voltage (Vmp/V)	42.7	42.7	42.7
Maximum Power Current (Imp/A)	14.4	15.1	16.4
Module Efficiency (%)	23.8	24.9	27.2

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

