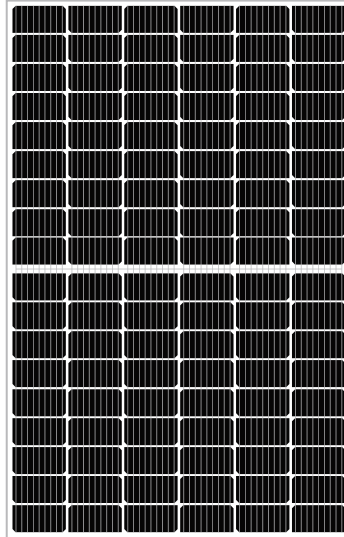
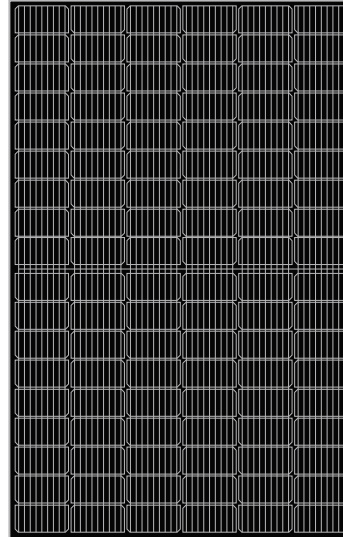


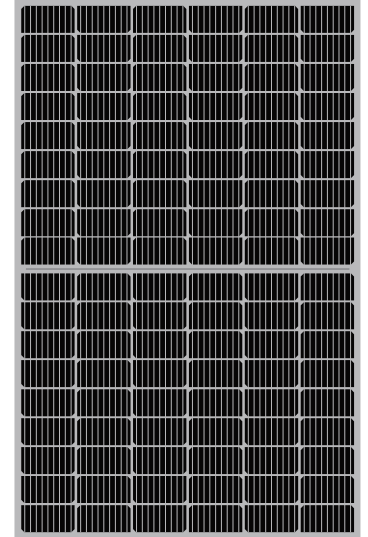
GKA182N108
430W-450W



GKA182N108S
STANDARD



GKA182N108BK
BLACK VERSION



GKA182N108BF
BIFACIAL

KEY FEATURES

M Busbar Solar Cell
M Busbar Solar Cell design improves module efficiency and offers better aesthetic appearance for rooftop installation.

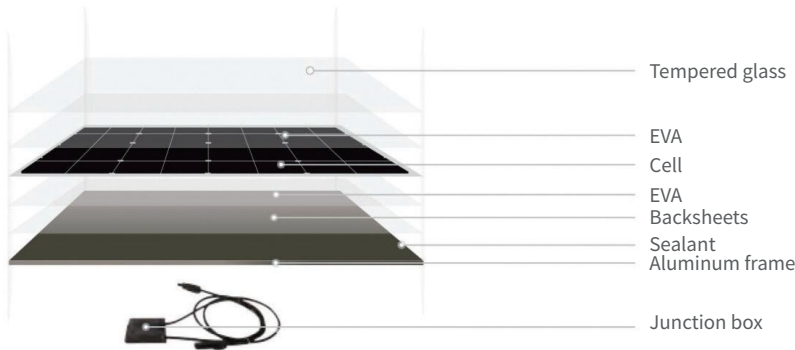
High Efficiency:
Higher module conversion efficiency (up to 23.04%) benefit from N-TOPCon cell technology.

PID Resistance:
Excellent Anti-PID performance guarantee limited power degradation for mass production.

Low-light Performance:
Advanced glass and cell surface textured design ensure excellent performance in low-light environment.

Severe Weather Resilience:
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

DURABILITY AGAINST EXTREME ENVIRONMENTAL CONDITIONS:
High salt mist and ammonia resistance certified.

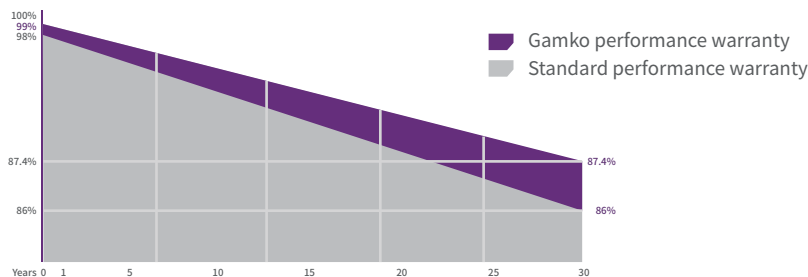


★ GAMKO SOLAR MODULE BOM

- CELLS: TIER 1 BRANDS SOLAR CELLS
- TEMPERED GLASS: ULTRA-CLEAR
- EVA: TRANSPARENCY > 93%
- BACKSHEETS: REFLECTIVITY > 80%, TPT
- JUNCTION BOX: IP68 MAX 30A
- SILICON GEL: UV, AGING-RESISTANT
- FRAME: ANODIZED ALUMINUM 6005-T5

LINEAR PERFORMANCE WARRANTY

12 Year Product Warranty · 30 Year Linear Power Warranty



★ GAMKO QUALITY CONTROL

- ◆ 2 EL testing avoid cells cracking of each solar module.
- ◆ 2 Power flash testing avoid false welding and insufficient power of each module.
- ◆ Packing tightly with angle protection avoid transportation broken.
- ◆ Gamko official Warranty cover all Gamko solar module 30 years.

GKA182N108
430W-450W



SPECIFICATION

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(P _{max})	430W	323W	435W	327W	440W	331W	445W	335W	450W	339W
Open Circuit Voltage (V _{oc})	39.04V	37.15V	39.27V	37.35V	39.50V	37.55V	39.73V	37.75V	39.96V	37.95V
Short Circuit Current (I _{sc})	14.10A	11.36A	14.17A	11.42A	14.24A	11.48A	14.31A	11.54A	14.38A	11.60A
Voltage at Maximum Power (V _{mpp})	32.65V	30.07V	32.85V	30.28V	33.06V	30.48V	33.26V	30.68V	33.46V	30.87V
Current at Maximum Power (I _{mp})	13.17A	10.74A	13.24A	10.80A	13.31A	10.86A	13.38A	10.92A	13.45A	10.98A
Module Efficiency STC (%)	22.02%		22.28%		22.53%		22.79%		23.04%	

STC: Irradiance 1000W/m², Cell temperature 25°C, AM1.5; Tolerance of P_{max}: ±3%; Measurement Tolerance: ±3%, P_{max} According Gamko's official testing.
 NOCT: Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s; Tolerance of P_{max}: ±3%; Measurement Tolerance: ±3%, P_{max} According Gamko's official testing.

BIFACIAL OUTPUT-REAR SIDE POWER GAIN

5%	Maximum Power(P _{max})	452W	457W	462W	467W	472W
	Module Efficiency STC (%)	23.12%	23.39%	23.66%	23.92%	24.17%
15%	Maximum power (P _{max})	495W	500W	506W	512W	518W
	Module Efficiency STC (%)	25.32%	25.62%	25.91%	26.22%	26.53%
25%	Maximum Power(P _{max})	538W	544W	550W	556W	563W
	Module Efficiency STC (%)	27.53%	27.85%	28.17%	28.47%	28.83%

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline TOPCON 182*91mm
Number of cells	108(6x18)
Module dimensions	1722*1134*30MM
Weight	19kg
Front cover	3.2mm (0.13inches)tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68 rated (3 by pass diodes)
Cable	4mm ² (0.006inches ²),Portrait: 300mm(11.81inches);
Connector	PV compatible

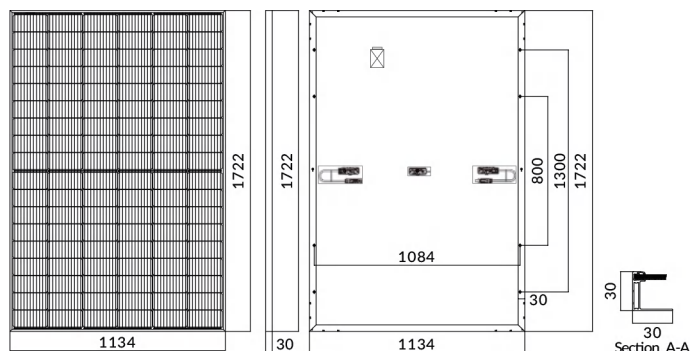
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P _{max}	-0.30%/°C
Temperature Coefficients of V _{oc}	-0.25%/°C
Temperature Coefficients of I _{sc}	-0.046%/°C

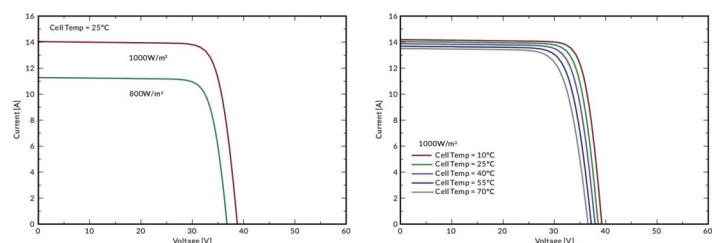
PACKAGING

Standard packaging	36pcs/pallet
Module quantity per 20' container	430pcs
Module quantity per 40' container	936pcs(HQ)

ENGINEERING DRAWINGS



Electrical Performance & Temperature Dependence



Specifications included in this datasheet are subject to change without notice.