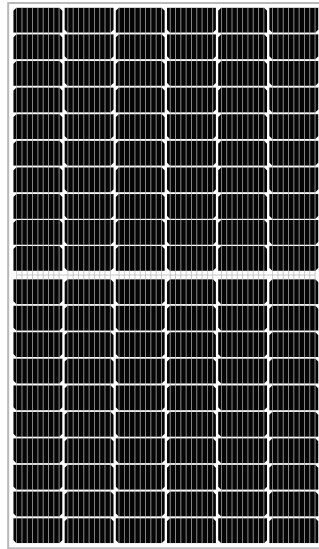
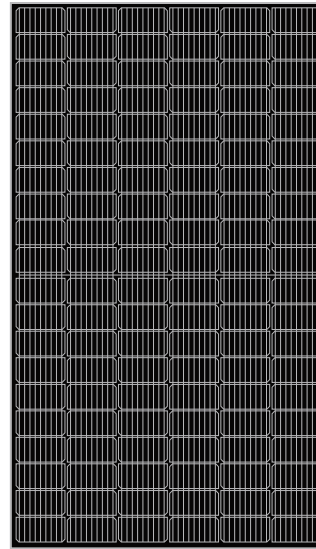


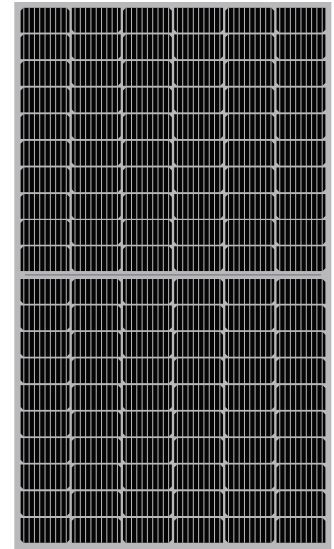
GKA182M120
440W-460W



GKA182M120S
STANDARD



GKA182M120BK
BLACK VERSION



GKA182M120BF
BIFACIAL

KEY FEATURES

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

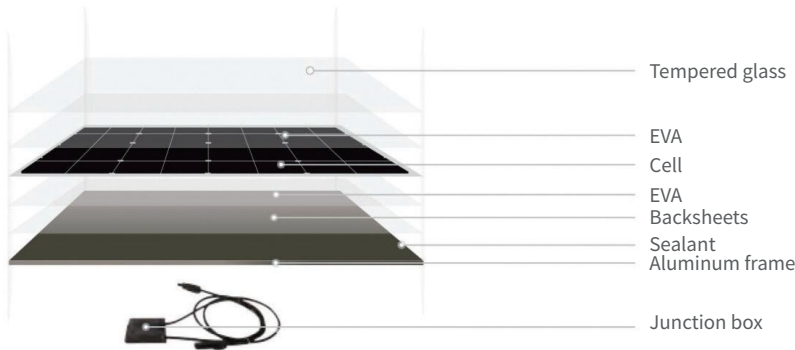
High Efficiency:
Higher module conversion efficiency (up to 21.24%) benefit from Passivated Emmitter Rear Contact (PERC) technology.

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.

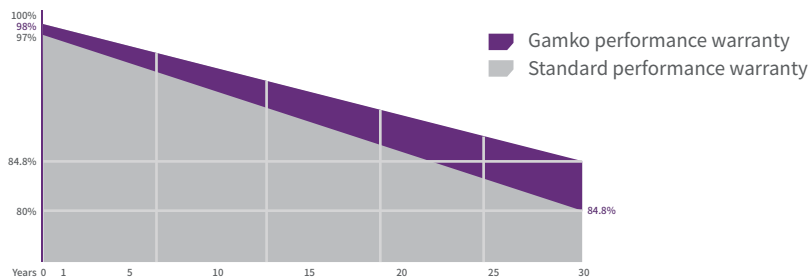


★ GAMKO SOLAR MODULE BOM

- 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.

GKA182M120
440W-460W



SPECIFICATION

	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(P _{max})	440W	331W	445W	335W	450W	339W	455W	343W	460W	347W
Open Circuit Voltage (V _{oc})	41.94V	39.56V	42.12V	39.83V	42.31V	40.09V	42.49V	40.35V	42.68V	40.62V
Short Circuit Current (I _{sc})	13.58A	10.87A	13.65A	10.91A	13.72A	10.95A	13.79A	10.99A	13.86A	11.03A
Voltage at Maximum Power (V _{mpp})	34.67V	32.29V	34.87V	32.56V	35.07V	32.82V	35.27V	33.08V	35.47V	30.33V
Current at Maximum Power (I _{mp})	12.69A	10.25A	12.76A	10.29A	12.83A	10.33A	12.90A	10.37A	12.97A	10.41A
Module Efficiency STC (%)	20.31%		20.55%		20.78%		21.01%		21.24%	

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})	462W	467W	473W	478W	483W
	Module Efficiency STC (%)	21.34%	21.58%	21.83%	22.07%	22.31%
15%	Maximum power (P _{max})	506W	512W	518W	523W	529W
	Module Efficiency STC (%)	23.37%	23.64%	23.91%	24.17%	24.44%
25%	Maximum Power(P _{max})	550W	556W	563W	569W	575W
	Module Efficiency STC (%)	25.41%	25.70%	25.98%	26.27%	26.56%

MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 182*91mm
Number of cells	120(6x20)
Module dimensions	1909*1134*30MM
Weight	21kg
Front cover	3.2mm coated tempered glass
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

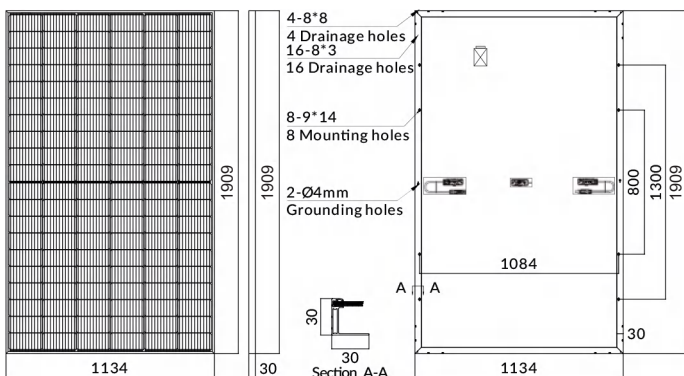
TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	45°C±2°C
Temperature Coefficients of P _{max}	-0.36%/°C
Temperature Coefficients of V _{oc}	-0.28%/°C
Temperature Coefficients of I _{sc}	-0.05%/°C

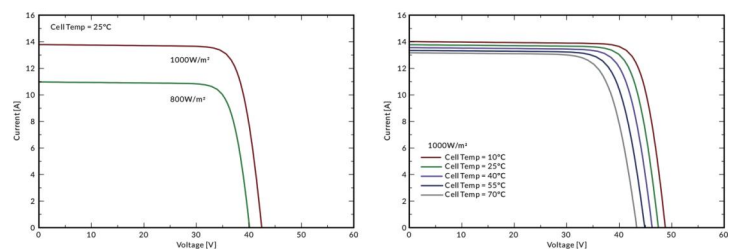
PACKAGING

Standard packaging	36pcs/pallet
Module quantity per 20' container	390pcs
Module quantity per 40' container	864pcs(HQ)

ENGINEERING DRAWINGS



Electrical Performance & Temperature Dependence



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