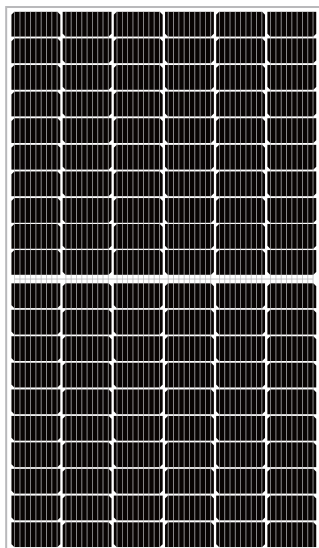
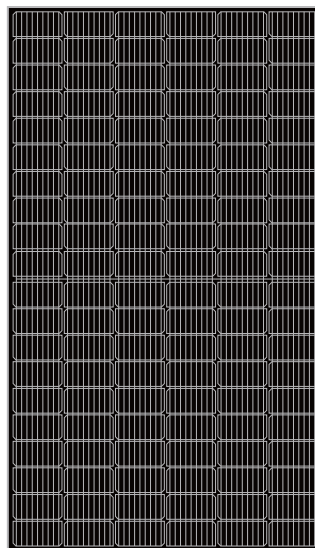


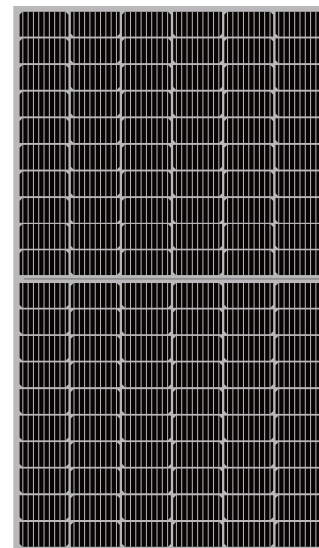
**GKA182N120**  
**480W-500W**



**GKA182N120S**  
**STANDARD**



**GKA182N120BK**  
**BLACK VERSION**



**GKA182N120BF**  
**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 23.10%) 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.



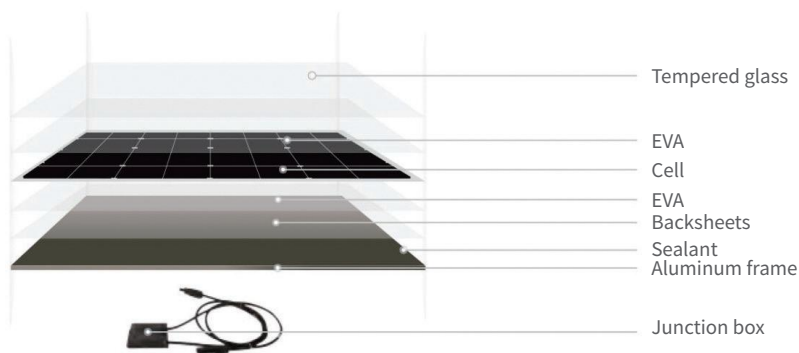
### Severe Weather Resilience:

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

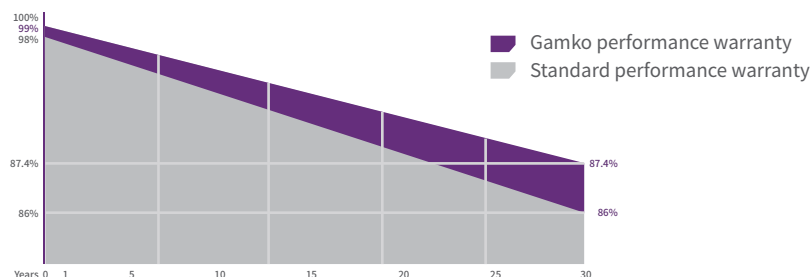
**JUNCTION BOX:** IP68 MAX 30A

**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.

## GKA182N120

### 480W-500W

#### SPECIFICATION

|                                        | STC    | NOCT   | STC    | NOCT   | STC    | NOCT   | STC    | NOCT   | STC    | NOCT   |
|----------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Maximum Power( $P_{max}$ )             | 480W   | 361W   | 485W   | 365W   | 490W   | 369W   | 495W   | 373W   | 500W   | 377W   |
| Open Circuit Voltage ( $V_{oc}$ )      | 43.27V | 41.17V | 43.48V | 41.35V | 43.69V | 41.53V | 43.90V | 41.71V | 44.11V | 41.89V |
| Short Circuit Current ( $I_{sc}$ )     | 14.19A | 11.44A | 14.26A | 11.50A | 14.33A | 11.56A | 14.40A | 11.62A | 14.47A | 11.68A |
| Voltage at Maximum Power ( $V_{mpp}$ ) | 36.20V | 33.36V | 36.38V | 33.55V | 36.57V | 33.73V | 36.75V | 33.91V | 36.93V | 34.09V |
| Current at Maximum Power ( $I_{mpp}$ ) | 13.26A | 10.82A | 13.33A | 10.88A | 13.40A | 10.94A | 13.47A | 11.00A | 13.54A | 11.06A |
| Module Efficiency STC (%)              | 22.16% |        | 22.39% |        | 22.63% |        | 22.87% |        | 23.10% |        |

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5; Tolerance of  $P_{max}$ :  $\pm 3\%$ ; Measurement Tolerance:  $\pm 3\%$ ,  $P_{max}$  According Gamko's official testing.

NOCT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s; Tolerance of  $P_{max}$ :  $\pm 3\%$ ; Measurement Tolerance:  $\pm 3\%$ ,  $P_{max}$  According Gamko's official testing.

#### BIFACIAL OUTPUT-REAR SIDE POWER GAIN

|     |                             |        |        |        |        |        |
|-----|-----------------------------|--------|--------|--------|--------|--------|
| 5%  | Maximum Power( $P_{max}$ )  | 504W   | 509W   | 515W   | 520W   | 525W   |
|     | Module Efficiency STC (%)   | 23.28% | 23.52% | 23.79% | 24.02% | 24.25% |
| 15% | Maximum power ( $P_{max}$ ) | 552W   | 558W   | 564W   | 569W   | 575W   |
|     | Module Efficiency STC (%)   | 25.50% | 25.76% | 26.05% | 26.28% | 26.56% |
| 25% | Maximum Power( $P_{max}$ )  | 600W   | 606W   | 613W   | 619W   | 625W   |
|     | Module Efficiency STC (%)   | 27.72% | 28.00% | 28.32% | 28.59% | 28.87% |

#### MECHANICAL CHARACTERISTICS

|                   |                                                                             |
|-------------------|-----------------------------------------------------------------------------|
| Cell type         | Monocrystalline TOPCON 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 <sup>2</sup> (0.006inches <sup>2</sup> ), Portrait: 300mm(11.81inches); |
| Connector         | PV compatible                                                               |

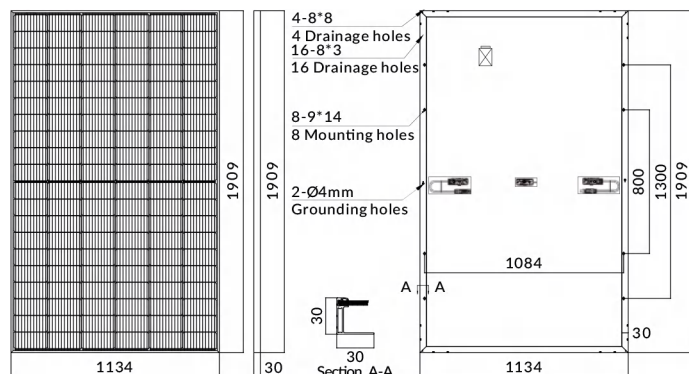
#### TEMPERATURE CHARACTERISTICS

|                                           |                              |
|-------------------------------------------|------------------------------|
| Nominal Operating Cell Temperature (NOCT) | 45°C $\pm 2^{\circ}\text{C}$ |
| Temperature Coefficients of $P_{max}$     | -0.30%/°C                    |
| Temperature Coefficients of $V_{oc}$      | -0.25%/°C                    |
| Temperature Coefficients of $I_{sc}$      | -0.046%/°C                   |

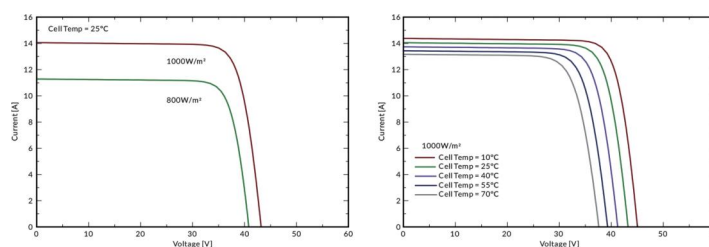
#### PACKAGING

|                                   |              |
|-----------------------------------|--------------|
| Standard packaging                | 36pcs/pallet |
| Module quantity per 20' container | 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.