

Off-Grid Inverter

GSA-10.2-12.4K1P-BL

GSA-10.2-12.4K1P-BL-PRO

「10.2/12.4kW」



Features



PV Oversizing

Support 200% PV oversizing



High-Temperature Adaptability

Full-power output at 40°C without derating



High-Power Charge / Discharge

Max. 250A charge, max. 280A discharge



CT Port Equipped

CT port equipped for anti-backflow function



Communication Port & BMS Supported

CAN / RS485 / WiFi ports equipped, enabling BMS communication



Dual Display Options

Flexible screen choice: segment display / touchscreen



5-Year Warranty

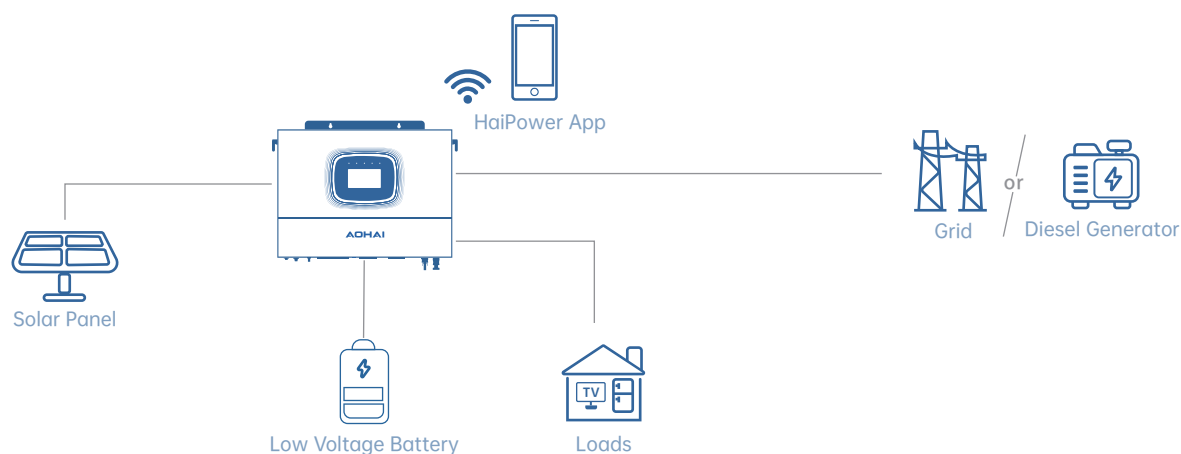
Durable design and craftsmanship for prolonged lifespan



Modular Design

Modular design for easy maintenance and efficient after-sales service

Off-grid Solution



Specifications

Technical Data

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Solar Input Data

Max. PV Input Power	20000W		24000W
Max. Input Voltage		500V	
Start-up Voltage		60V	
MPPT Voltage Range		60V~450V	
Max. Input Current per MPPT		40A+40A	
Max. Short Circuit Current per MPPT		50A+50A	
Number of MPPT		2	
Number of Strings per MPPT		2+2	

AC Input Data

Nominal Input Voltage		230Vac	
Input Voltage Range		90~280V	
Max. Input Current		70A	
Nominal Input Power		16100W	
AC Frequency Range		50 / 60Hz	

Battery Data

Battery Type		Li-Ion / Lead-acid	
Nominal Battery Voltage		48V	
Battery Voltage Range		40~60V	
Max. Discharge Current	220A		280A
Max. Charge Power	10200W		12000W
Li-Ion Battery Activation		Yes	
Li-Ion Battery Communication		CAN / RS485	
Max. Solar Charge Current	220A		250A
Max. AC Charge Current	190A		210A
Max. Charge Current (PV+AC)	220A		250A

Inverter Output Data

Nominal Output Power	10200W		12400W
Peak Apparent AC Power	20000W		24000W
Nominal AC Voltage		230V	
Nominal Grid Frequency		50 / 60Hz	
Voltage Waveform		Pure Sine Wave	
Transfer Time		4ms	
Max. Output Current	44.3A		54A

Overload Protection

60s@102%-110% load;
30s@110%-130% load;
5s@130%-200% load;

THDv (@linear load)

≤3%

Efficiency

Peak Efficiency		94%	
MPPT Efficiency		≥99.9%	

Protect

DC Surge Protection		Yes	
AC Surge Protection		Yes	
AC Short Circuit Protection		Yes	

System Parameters

Dimension (W*H*D)	540*395*220mm(Excluding terminals, handles, and Hanging)		
Weight		21.7kg	
Relative Humidity		5%~95%	
Operating Temperature Range		-10°C~60°C	
Noise Emission		≤50dB	
Altitude		2000m	
Cooling Method		Fan	
Ingress Protection		IP54	

Characteristic

Number of AC Output	1+Smart Load Output (Gen / Load)			
Display	Segment LCD & APP	LCD (Touch Screen) & APP	Segment LCD & APP	LCD (Touch Screen) & APP
Communication Interface	RS485 / USB / CAN / Wi-Fi			
Parallel Capability	9			
Power Grid Side Energy Detection Method	CT (optional)			