

Off-Grid Inverter

FSF-4.2K1P-BL

FSF-4.2K1P-BL-PRO

「4.2kW」



Features

High-Power Module Compatibility

Higher PV input current up to 18A

High-Temperature Adaptability

Full-power output at 40°C without derating

High-Rate Charging and Discharging

Max. 120A charge, max. 140A discharge

CT Port Equipped

CT port equipped for anti-backflow function

Remote Monitoring

Built-in WiFi module for HaiPower monitoring

Seamless Switchover

UPS-level switching time: 4ms

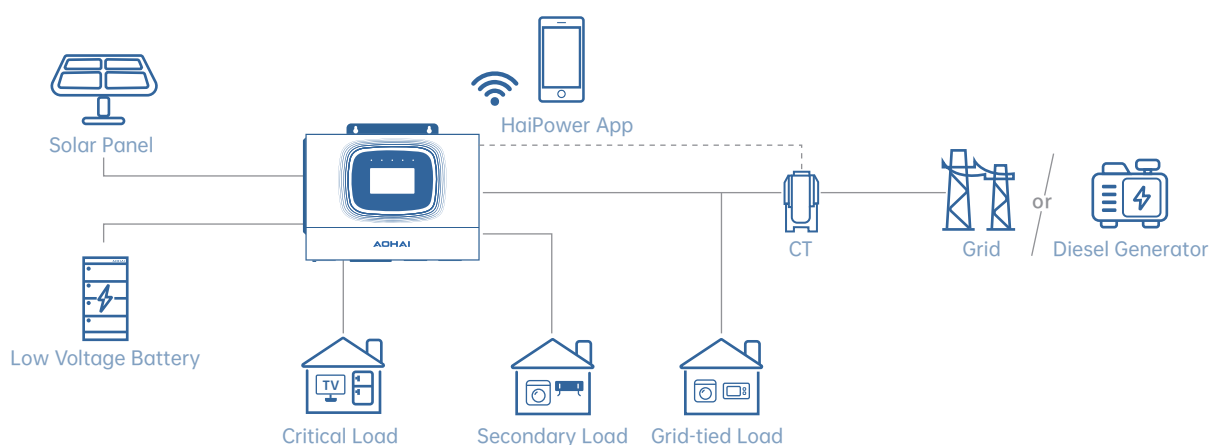
Dual Display Options

Flexible screen choice: segment display / touchscreen

Overload Capacity

Peak power to reach 2 times the rated power for 5s in off-grid mode

Off-grid Solution



Specifications

Technical Data

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Solar Input Data

Max. PV Input Power	6300W
Max. Input Voltage	500V
Start-up Voltage	60V
MPPT Voltage Range	60V~450V
Max. Input Current per MPPT	18A
Max. Short Circuit Current per MPPT	28A
Number of MPPT	1

AC Input Data

Nominal Input Voltage	230Vac
Input Voltage Range	90~280V
Max. Input Current	27A
Nominal Input Power	6200W
AC Frequency Range	50 / 60Hz (Auto sensing)

Battery Data

Battery Type	Li-Ion / Lead-acid
Nominal Battery Voltage	24V
Battery Voltage Range	20~30V
Max. Discharge Current	140V
Max. Charge Power	3300W
Li-Ion Battery Activation	Yes
Li-Ion Battery Communication	CAN / RS485
Max. Solar Charge Current	120A
Max. AC Charge Current	100A
Max. Charge Current (PV+AC)	120A

Inverter Output Data

Nominal Output Power	4200W with PV & battery 3600W with battery only
Peak Apparent AC Power	8400VA
Nominal AC Voltage	230V
Nominal Grid Frequency	50 / 60Hz
Voltage Waveform	Pure Sine Wave
Transfer Time	4ms
Max. Output Current	18.3A
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)	385*295*115mm
Weight	5.4kg
Relative Humidity	5%~95%
Operating Temperature Range	-10°C~60°C
Noise Emission	≤50dB
Altitude	2000m
Cooling Method	Fan Cooling
Ingress Protection	IP21

Characteristic

Number of AC Output	2
Display	Segment LCD&APP Touch Screen LCD&APP
Communication Interface	RS485/ CAN/ Wi-Fi / CT (optional) RS485/ CAN/ Wi-Fi / CT (optional) / USB / Dry contact
Parallel Capability	/