



Off-Grid Inverter

FSC-8~12K1P-BL
「8/10/12kW」



Features

⚡ PV Oversizing

Up to 200% PV accessing, 150% PV oversizing

🔌 Exceptional Load-carrying Capability

Battery discharge current up to 280A, support higher loads powered by battery only

⚡ Parallel Connection

Support parallel connection up to 9 units

🔌 Powerful Instant Overload Capacity

Support 2 times the rated power for 5 seconds in off-grid mode

🔌 High-Temperature Adaptability

Allow full-power output under high-temperature conditions

∞ Flexible Connection

- GEN port for generator input
- Dual AC outputs for smart load management

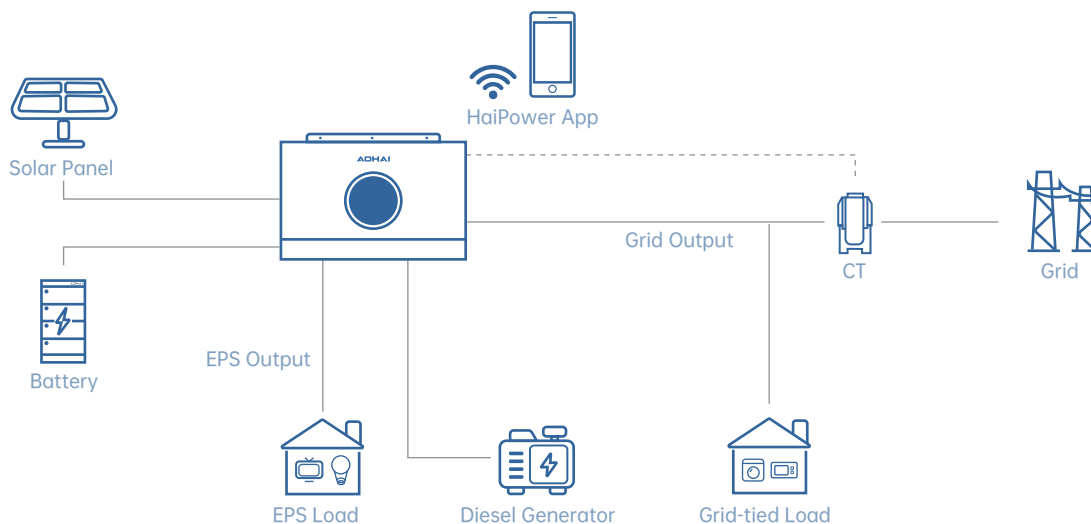
⌚ Seamless Switchover

UPS-level switching time: 4ms

🔌 CT Connection

Equipped with CT port for anti-backflow function

Energy Storage Solution



Specifications

| Model | FSC-8K1P-BL | FSC-10K1P-BL | FSC-12K1P-BL |
|---------------------------------------|-------------|---|--------------|
| Solar Input Data | | | |
| Recommended Max. PV Array Size | 16000W | 20000W | 24000W |
| Max. PV Input Power | 12000W | 15000W | 18000W |
| Max. Input Voltage | | 500V | |
| Start-up Voltage | | 90V | |
| MPPT Voltage Range | | 90~450V | |
| Max. Input Current per MPPT | | 30+30A | |
| Max. Short Circuit Current per MPPT | | 44+44A | |
| Number of MPPT | | 2 | |
| Number of Strings per MPPT | | 2 | |
| Battery Data | | | |
| Battery Type | | Li-Ion / Lead-acid | |
| Nominal Battery Voltage | | 48V | |
| Battery Voltage Range | | 40~60V | |
| Max. Discharge Current | 190A | 230A | 280A |
| Max. Charge / Discharge Power | 8000W | 10000W | 12000W |
| Li-Ion Battery Activation | | Yes | |
| Li-Ion Battery Communication | | CAN / RS485 | |
| Max. Solar Charge Current | 180A | 220A | 250A |
| Max. AC Charge Current | 160A | 190A | 210A |
| Max. Charge Current (PV+AC) | 180A | 220A | 250A |
| AC Input Data (Grid / GEN) | | | |
| Nominal Input Voltage | | 230Vac, L / N / PE | |
| Input Voltage Range | | 90-280(APL) / 170-265(UPS) | |
| Max. AC Current From Utility Grid | 70A | 70A | 70A |
| Max. Apparent Power from Utility Grid | 8000VA | 10000VA | 12000VA |
| Max AC Current From Generator | 60A | 60A | 60A |
| Max. Apparent Power From Generator | 8000VA | 10000VA | 12000VA |
| AC Frequency Range | | 50 / 60Hz (Auto sensing) | |
| Inverter Output Data | | | |
| Nominal Output Power | 8000W | 10000W | 12000W |
| Peak Apparent AC Power | 16000VA | 20000VA | 24000VA |
| Nominal AC Voltage | | 230Vac | |
| Nominal Grid Frequency | | 50 / 60Hz | |
| Voltage Waveform | | Pure Sine wave | |
| Transfer Time | | 4ms | |
| Max. Output Current | 34.8A | 43.5A | 52.2A |
| Overload Protection | | 30s@102%-110% load; 10s@110%-130% load; 5s@130%-200% load | |
| THDv (@linear load) | | <5% | |
| Efficiency | | | |
| Peak Efficiency | | 94% | |
| MPPT Efficiency | | ≥99.9% | |
| Protection | | | |
| PV Reverse Polarity Protection | | yes | |
| AC Short-circuit Current Protection | | yes | |
| Grid Monitoring | | yes | |
| Over-current Protection | | yes | |
| Over-voltage Protection | | yes | |
| AC Surge Protection | | yes | |
| DC Surge Protection | | yes | |
| System Parameters | | | |
| Dimension (W*H*D) | | 625mm*400mm*120mm | |
| Weight | | 17.9kg | |
| Relative Humidity | | 5%~95% (Non-condensing) | |
| 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 | | LCD & APP | |
| Communication Interface | | RS485 / USB / CAN / Wi-Fi (built-in) / Dry-Contact | |
| Parallel Capability | | 9 | |