



Off-Grid Inverter

FSC-8~12K1P-BL

「8/10/12kW」

Features



Oversizing Ratio

Higher PV/AC ratio up to 1.5, allowing greater energy harvest



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

OUT² Smart Load Management

Dual AC outputs to power loads on demand priority



Generator Input

Equipped with GEN port to connect with diesel generator



Seamless Switchover

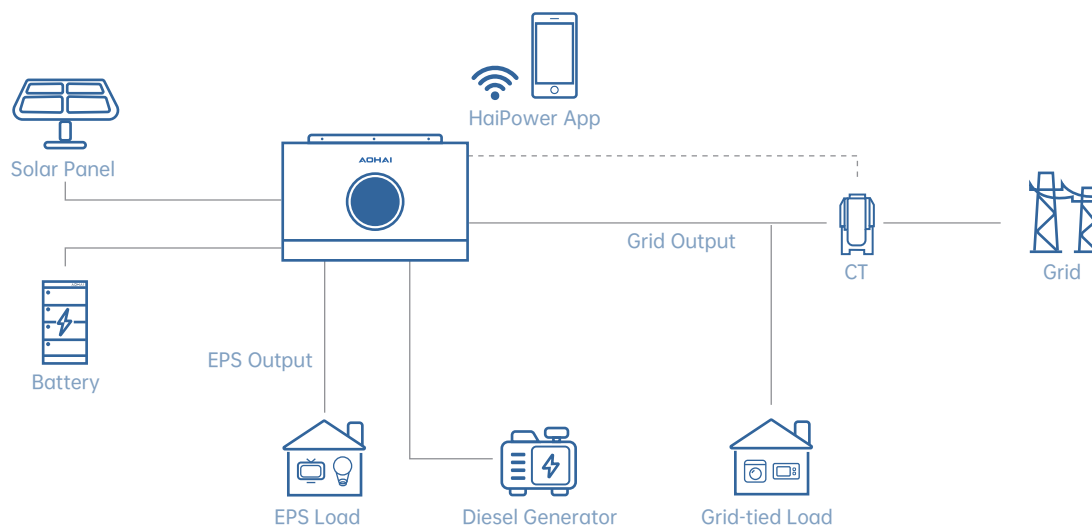
UPS-level switching time $\leq 4\text{ms}$



Superior High-Temperature Stability

Allow full-power output up to 12kW under high-temperature conditions

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)		625*400*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	