

SOLAR STORAGE INVERTER
ALL-IN-ONE MACHINE



Product Introduction

The F09 series solar storage inverter all-in-one machine adopts control technology that integrates analog and digital systems, offering comprehensive software and hardware protection. It can efficiently control the energy conversion between solar energy, utility power, battery storage, and loads, with a peak efficiency of over 90%. Intelligent human-machine interaction and remote operation and maintenance capabilities ensure the ultimate electricity usage experience for customers.



Excellent load adaptability
50Hz pure sine wave AC power with strong overload capacity.
It is suitable for various household appliances and can handle diverse types of loads.



High safety factor
Equipped with PV current and power limiting protection, PV nighttime anti-reverse charging protection, PV reverse connection protection, output short-circuit, charging short-circuit, overvoltage, undervoltage, overcurrent, and overtemperature protections.



Remote operation and maintenance capabilities
Features an intelligent touch screen and a WiFi module, allowing for remote monitoring of the device's operational status.

Model: WKC		F09-3.2k-8kWh	F09-6.2k-10kWh	F09-12k-32kWh
Rated Power		3.2kW	6.2kW	12kW
Rated Capacity		8kWh	10.24kWh	32kWh
Output Phases		Single-phase output		
Battery Type		Lithium Iron Phosphate (LiFePO4) battery		
Utility/Generator Input	Input Voltage Range	170~280 Vac	85~140/170~280 Vac	90~280 Vac
	Rated Input Frequency	50/60Hz		
	Max. Input Current	40A	40A	160A
Inverter Mode	Peak Power	4kVA	7.8kVA	24kVA
	Rated Output Voltage	230/110Vac(Single-phase)	115/230Vac(Single-phase)	220/230/240Vac(Single-phase)
	Motor Starting Capability	2HP		
	Rated Output Frequency	50Hz or 60Hz		
	Output Waveform	Pure Sine Wave		
PV Input	Grid to Inverter Transfer Time	0ms	10 (Appliance / UPS mode), 20 (Generator mode)	
	Number of MPPT Trackers	1	1	2
	Max. Input Power	3400/5600W	7440W	Single MPPT: 27A/9kW; DualMPPT: 27A per channel, Total power 15kW
	Max. PV Charging Current	60/100A	100A	160A
	Max. Open Circuit Voltage	200Vdc	200V	500A
	MPPT Operating Voltage Range	33~130/70~130Vdc	70~164Vdc	60~450Vdc
	MPPT Tracking Efficiency	≥99%	99.90%	≥99%
Battery	Battery Rated Voltage	25.6Vdc	51.2Vdc	48Vdc
	Battery Voltage Range	22.4~29.2Vdc	44.8~57.6Vdc	44.8~58.4Vdc
	Charging Method	Three-stage charging (Lithium iron phosphate / LiFePO4 battery)		
	Max. Discharge/Utility Charging Current	60A	60A	160A
	Max. Hybrid Charging Current	120/160A	160A	160A
Protection Features	All-in-one Machine Protection Features	PV current and power limit protection, PV night anti-reverse charging protection, PV reverse polarity protection, output short circuit, charging short circuit, overvoltage, undervoltage, overcurrent, overtemperature protection, etc.		
Dimensions	H*W*D (mm)	480*910*235	600*1070/1111*173	722*744*500
	Net Weight (kg)	87.5	115	259.5
Operating Environment	Communication	WiFi (Optional)	CAN/RS485/Bluetooth/WiFi	WiFi (Optional)
	Application Scenario	Indoor		
	Protection Level	IP20		
	Humidity	5%~95% Relative humidity	15%~85% Relative humidity	5%~95% Relative humidity
	Operating Temperature	-10°C~55°C	-10°C~55°C (Recommended: 10°C~35°C)	-0°C~55°C
	Storage Temperature	-20°C~60°C		
	Altitude	3000m(Power derating above 2000m)	<3000m	4000m(Power derating above 2000m)
Cooling Method		Forced air cooling		

Note: The above data is for reference only and is subject to change without prior notice. For special customization requests, please contact the equipment manufacturer.