SUNGOLDPOWER

FR12K-B



12kW 48V Solar Charge Inverter

Freedom 12K-B

This series is a new type of solar storage inverter that integrates PV storage, mains charge, and energy storage and outputs sinusoidal AC. Equipped with **DSP** control and advanced control algorithm, it has high response speed and good reliability, applies to off-grid systems and industrial scenarios.

Equipped with **two-channel MPPT**s, with an efficiency of up to **99.9%** and a maximum single-channel current of **22A**, perfectly fitting high-power modules. Support adjusting the voltage of each phase within the range of **100 VAC, 105 VAC, 110 VAC, 115 VAC,120 VAC and 127 VAC.**It ensures an uninterrupted power supply during power outages.

- Support Different Batteries
- Dual Activation Function
- Supports 6 parallel units
- Supports 6 Different Voltage
- Dual MPPT
- WIFI Module Monitoring
- 2 output modes 2 charge modes
- Smart load output
- LCD Display
- Breaker Module

View Full Product Catalog

WWW.SUNGOLDPOWER.COM

833-761-6080

Work With SunGoldPower

Apply for Dealer Program

Request Bulk Pricing

Technical Specifications

Product Model	FR12K-B
Inverter Output	
Rated Output Power	12,000W
Max.Peak Power	24,000W
Rated Output Voltage	120/240 VAC (single-phase/split-phase)
Load Motor Capacity	6HP
Rated Frequency	50/60Hz
Output wave	Pure Sine Wave
Switching Time	10ms typical
Parallel Number	6
Overload Proterction	After overload protection is enabled, the inverter output will be restored after 3 min, and after 5 times of overload, the output will be off until the inverter is restarted. (102%< load <110%): An error will be reported, and the output will be turned off after 5 min. (110%< load <125%): An error will be reported, and the output will be turned off after 10s. Load >125%: An error will be reported, and the output will be turned off after 5s.
Battery	
Battery Type	Lithium-ion battery/lead-acid battery/user-defined
Rated Battery Voltage	48Vdc
Voltage Range	40-60Vdc
Max.PV Charging Current	200A
Max.Grid/Generator Charging Current	120A
Max.Hybrid Charging Current	200A
PV Input	
MPPT Channel Number	2
Max. Input Power	6600W+6600W
Max. Input Current	22/22A
Max. Open Circuit Voltage	500Vdc
MPPT Operating Voltage Range	125-425Vdc
Grid/generator Input	
Input Voltage Range	90-140Vac
Input Frequency Range	50/60Hz
Bypass Overload Phase Current	63A
Efficiency	
MPPT Tracking Efficiency	99.9%
Max. efficiency of battery inverter	92%
General	
Dimensions	28.48 X 17.64 X 5.91inches (723.4 X 448X 150mm)
Weight	61.73lbs(28kg)
Protection level	IP20,for Indoor use only
Ambient temperature	14-131℉,>113℉ derated(-10~55℃,>45℃ derated)
Noise	<60dB
Cooling Mode	Intelligent Fan
Communication	
Built-in Interfaces	RS485 / CAN /USB / Dry contact
External Modules(Optional)	Wi-Fi / GPRS
Certification	
Safety	EN61000-6-1, EN61000-6-3
EMC	FCC 15 class B
RoHS	Yes

Sun Gold Power Copyright. Information may be subject to change without notice during product improving