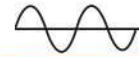


Product Overview

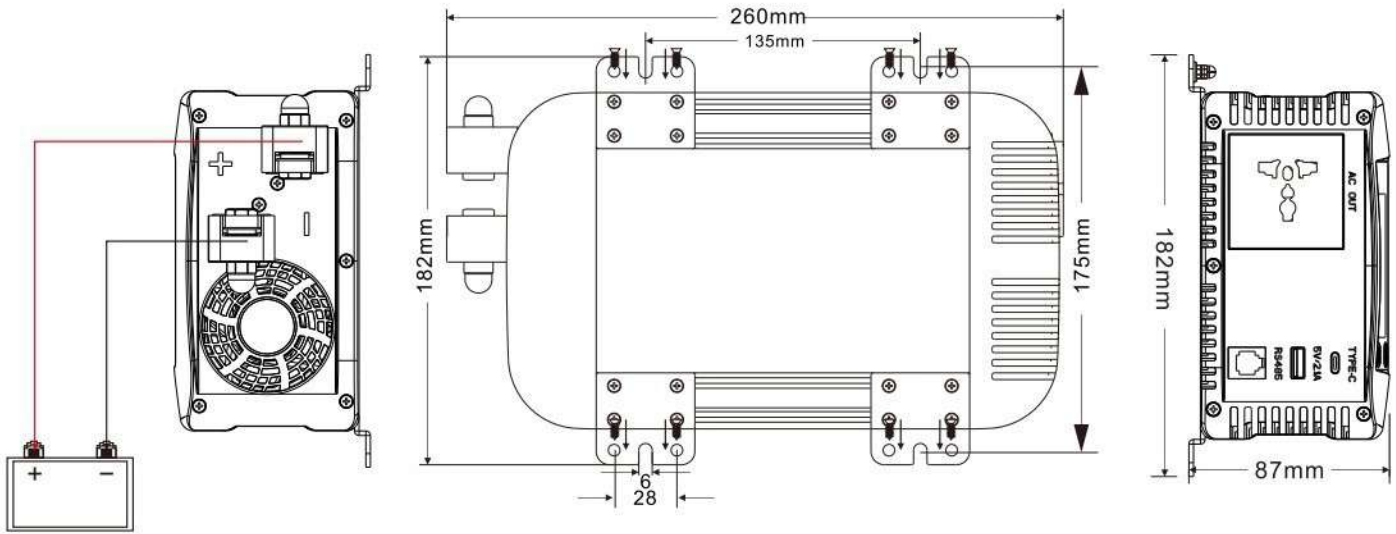
- 1.Power Conversion: Converts direct current (DC) into pure sine wave alternating current (AC) with a rated continuous output of 500 W.
- 2.Circuit Architecture: Adopts a digital circuit design with comprehensive software and hardware protection mechanisms.
- 3.Load Compatibility: Strong load-carrying performance; suitable for inductive,capacitive, and resistive loads.
- 4.Dual Digital Display: Features both on-unit digital display and remote digital display, providing real-time transmission of various input and output parameters.
- 5.Application Scenarios: Versatile use in home emergency backup, vehicle-mounted power supply, and outdoor power applications.



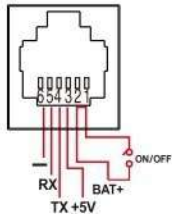
Model		PFJ500P-12V-V3	Note
Electrical Parameters	Rated Output Power	500W	Continuous stable output
	Peak Output Power	1000W	Duration<1s
	Output Waveform	Pure Sine Wave	Stronger load capacity
	DC Input Voltage	10~16V	Wide input voltage range
	Maximum DC Input Current	54A	Strong adaptability
	AC Output Voltage	230V	±10%
	AC Output Frequency	50Hz ±1	—
	Efficiency	Half Load ≥ 90%(Full Load ≥ 88%)	Full-load /Half-load Efficiency
	Total Harmonic Distortion (THD)	≤ 5% (Resistive Load)	Protection for electrical appliances
	Standby Current	≤ 0.5A	Low no-load loss
Input Characteristics	DC Undervoltage Alarm	10.5V±0.5	Alarm: 2 beeps
	DC Undervoltage Protection	10.0V±0.2	3 beeps and fault code E-1 displayed
	DC Undervoltage Recovery	12.8V±0.5	—
	DC Overvoltage Protection	16.0V±0.2	4 beeps and fault code E-2 displayed
	DC Overvoltage Recovery	15.5V±0.5	—
Protection Functions	Over-temperature Protection	Internal temperature ≥75°C: automatic shutdown; resumes when ≤45°C.	5 beeps and fault code E-3 displayed
	Output Current-limiting Protection	750W~1000W	1.5 to 2 times the rated output power
	Short-circuit Protection	Output short-circuit protection with instantaneous trip	6 beeps and fault code E-5 displayed
	Output Overload Protection	525W~600W	11 beeps and fault code E-4 displayed
	Reverse Polarity Protection	Built-in fuse	protect the inverter
	Moisture Protection	Entire PCB coated with conformal coating	Moisture-proof ,Mold-proof,Salt-fog resistant
	Soft Start	3-second soft start for output	Reduce start-up surge
	Insulation and safety test	2000V AC applied between AC output and ground, and between AC output and DC input for 1 min Enclosure to GND impedance≤0.1Ω	EN62109-1/-2(LVD)
Physical Environment Parameters	Cooling	Fan start temperature: ≥45°C; Fan stop temperature: ≤40°C.	Cooling
	Operating Ambient Temperature	-10~ +45°C	Adequate ventilation required
	Storage Temperature	-20°C~+70°C	—
	Relative Humidity	0%~95%	Non-condensing
	Protection Rating	IP21	Complies with IEC 60529
	Enclosure Material	Aluminum enclosure + flame-retardant plastic cover	—
	Product Dimensions	260×182×87mm	L × W × E
	Product Weight	2.08kg	Net weight
	Mounting Method	Desktop / Wall-mounted	—
Standard Accessories	Battery connection cables	1 set of 6mm ² red and black connecting cables	60A terminals on both ends
Display and Interface	Remote LCD	Input Voltage Display/Output Voltage Display/Load Power Display/Temperature DisplayFault Code	Push Button
	Output Socket	UK socket	X1
	USB Output	Type-A port+Type-C port: 5V 3A / 9V 3A / 12V 3A	X1
	DC Terminal Block	Tp45 Terminal Block	—
	RJ11 INTERFACE	Connection for remote LCD display box	Real-time data transmission (I/O parameters)



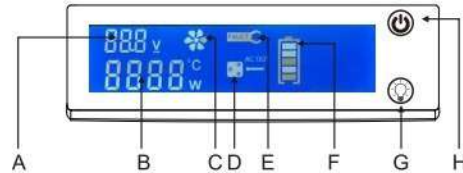
■ Dimensions and Installation



■ RJ11 Interface Description

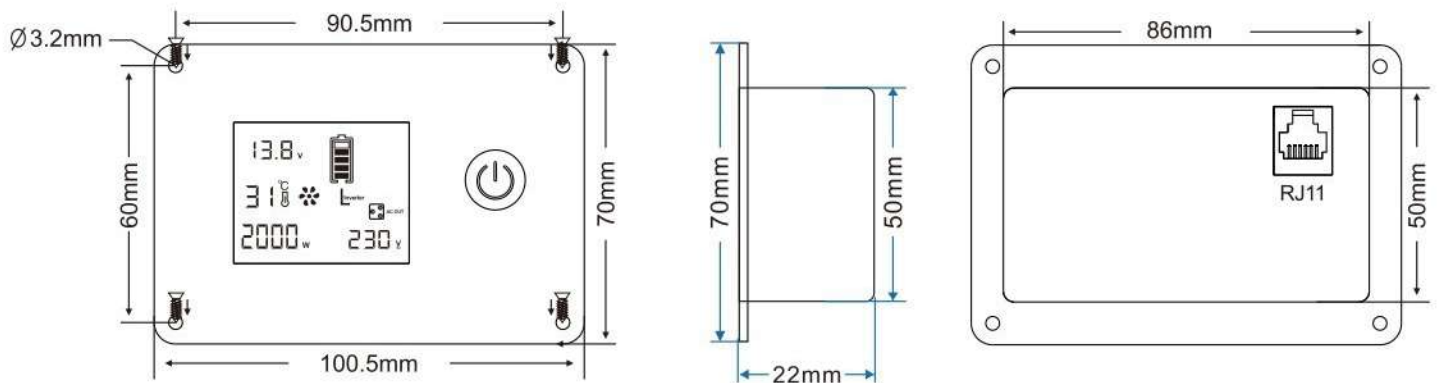


■ LCD Indicator



- A. Battery Voltage/AC Voltage
(displayed alternately every 10 seconds) /
- B. Power Consumption Display / Temperature Display
(displayed alternately every 10 seconds)
- C. Fan Icon
- D. AC Output Icon
- E. Error Icon
- F. Battery Icon
- G. Display Backlight Switch
- H. Power Switch / On/Off Switch

■ Product dimensions



■ Load Derating Curve vs. Ambient Temperature

