

## Product Overview

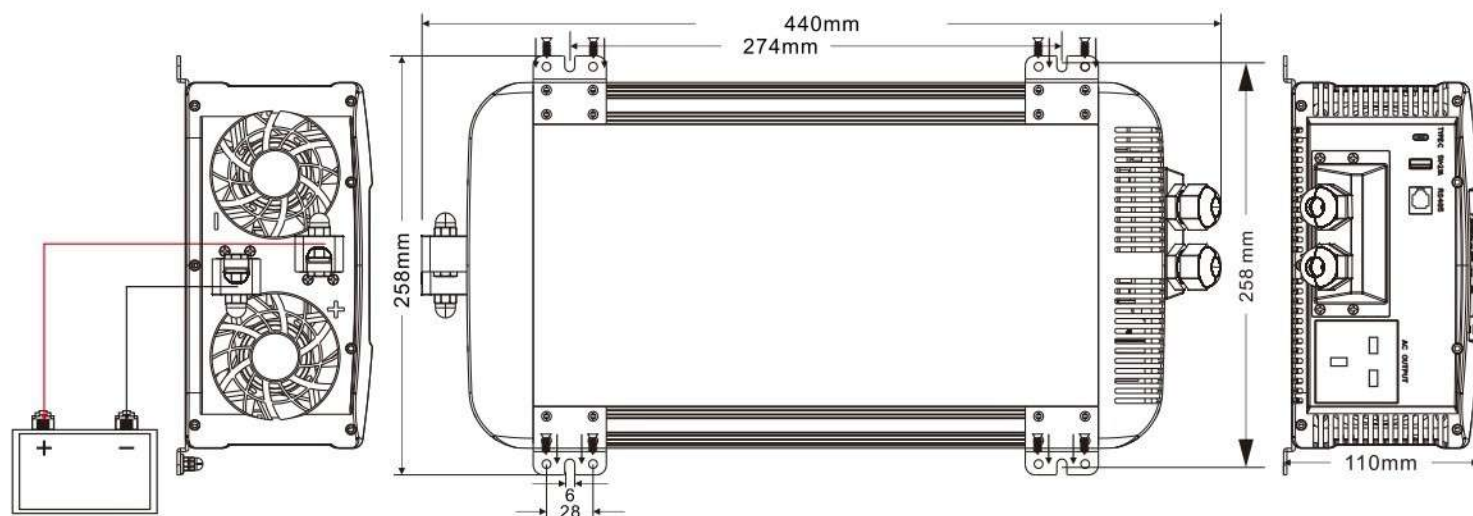
- 1.Power Conversion: Converts direct current (DC) into pure sine wave alternating current (AC) with a rated continuous output of 4000 W.
- 2.Circuit Architecture: Adopts a digital circuit design with comprehensive software and hardware protection mechanisms.
- 3.Load Compatibility: Strong load-carrying 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.



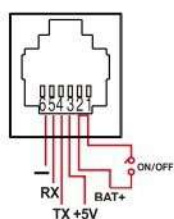
| Model                           |                                    | PFJ4000P-12V-V3                                                                                                                | Note                                          |
|---------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Electrical Parameters           | Rated Output Power                 | 4000W                                                                                                                          | Continuous stable output                      |
|                                 | Peak Output Power                  | 8000W                                                                                                                          | Duration<1s                                   |
|                                 | Output Waveform                    | Pure Sine Wave                                                                                                                 | Stronger load capacity                        |
|                                 | DC Input Voltage                   | 10~16V                                                                                                                         | Wide input voltage range                      |
|                                 | Maximum DC Input Current           | 328A                                                                                                                           | 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                    | ≤ 1.1A                                                                                                                         | 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 | 6000W~8000W                                                                                                                    | 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         | 4200W~4800W                                                                                                                    | 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<br>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                 | 440×258×110mm                                                                                                                  | L × W × E                                     |
|                                 | Product Weight                     | 7.38kg                                                                                                                         | Net weight                                    |
|                                 | Mounting Method                    | Desktop / Wall-mounted                                                                                                         | —                                             |
| Standard Accessories            | Battery connection cables          | 1 set of 35mm² red and black connecting cables                                                                                 | 200A 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)  |



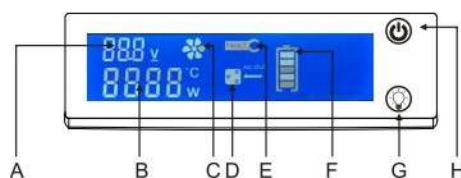
## ■ Dimensions and Installation



## ■ RJ11 Interface Description

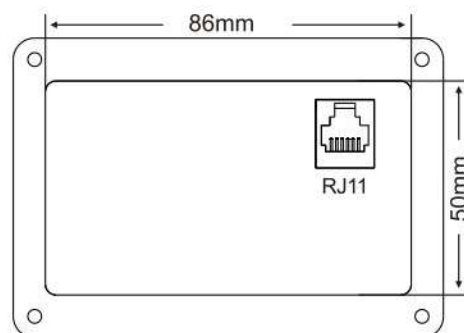
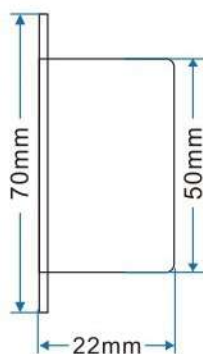
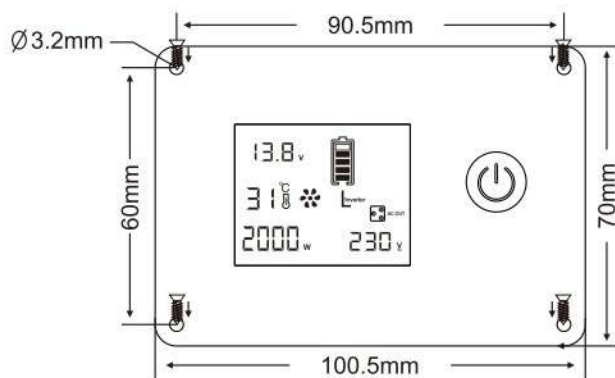


## ■ LCD Indicator



- 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

