

Kemot 3500

Kemot Prosinus 3500 Pure Sine Wave Inverter with Charging Function User Manual

Model: Prosinus-3500/48 (URZ3430)

1. INTRODUCTION

The Kemot Prosinus 3500 is an advanced emergency power supply system designed to protect selected electrical devices from power outages. This unit functions as a pure sine wave inverter, a battery charger, and an uninterruptible power supply (UPS). It ensures continuous operation of critical equipment by converting DC power from an external battery into stable 230V AC power.

Key features of the Kemot Prosinus 3500 include:

- Pure Sine Wave Output:** Provides clean and stable AC power, suitable for sensitive electronics.
- Automatic Voltage Regulation:** Maintains a consistent output voltage.
- External Battery Charging:** Capable of recharging connected external batteries.
- Comprehensive Protection:** Includes safeguards against overload, short-circuit, and incorrect voltage levels.



Figure 1.1: Packaging highlighting the Prosinus 3500's features: pure sine wave AC output, automatic voltage regulation, and external battery charging.



Figure 1.2: The Kemot Prosinus 3500 provides reliable emergency power for household applications.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installing or operating the Kemot Prosinus 3500. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Only qualified personnel should perform electrical connections. Ensure all connections are secure and correctly polarized.
- **Ventilation:** Install the unit in a well-ventilated area to prevent overheating. Do not block ventilation openings.
- **Battery Safety:** Use only recommended battery types and ensure correct voltage (48V DC for this model). Connect batteries with appropriate fuses and observe polarity. Batteries can produce explosive gases; ensure adequate ventilation.
- **Environment:** Avoid exposure to moisture, direct sunlight, and extreme temperatures. Do not operate in environments with flammable gases or liquids.
- **Internal Components:** Do not open the unit. There are no user-serviceable parts inside. Refer all servicing to qualified service personnel.

The Kemot Prosinus 3500 is equipped with multiple safety features, including protection against overloads, short circuits, and incorrect input/output voltages, ensuring safe operation within your home or workspace.



Figure 2.1: Always observe safety warnings when handling electrical equipment.

3. PRODUCT OVERVIEW

3.1 Front Panel



Figure 3.1: Front view of the Kemot PROsinus 3500.

The front panel features a digital display that provides real-time information on input voltage, output voltage, battery status, and operational mode. It also includes an ON/OFF switch for the inverter output and indicator lights for system status.

3.2 Rear Panel



Figure 3.2: Rear view of the Kemot Prosinus 3500, showing 48V DC battery input terminals.

The rear panel includes:

- **AC Input:** For connecting to the main power grid.
- **AC Output:** Sockets for connecting electrical appliances.
- **Battery Terminals:** Positive (+) and Negative (-) terminals for connecting external 48V DC batteries.
- **Circuit Breaker:** Provides overcurrent protection.
- **Cooling Fan:** Ensures proper thermal management of the unit.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of your Kemot Prosinus 3500:

- 1. Battery Selection:** The Kemot Prosinus 3500 (Model URZ3430) requires a 48V DC external battery system. For optimal performance, select a battery with sufficient capacity. A general guideline is that a 100W load consumes approximately 10A from the battery. Calculate your total load to determine the required battery capacity.
- 2. Battery Connection:** Connect the external 48V DC battery bank to the designated battery terminals on the rear panel. Ensure correct polarity: connect the positive (+) terminal of the battery to the positive (+) terminal of the inverter, and the negative (-) terminal of the battery to the negative (-) terminal of the inverter. Secure all connections tightly.
- 3. Mains Power Connection:** Connect the AC input of the inverter to a standard 230V AC wall outlet using a suitable power cord.
- 4. Load Connection:** Plug your electrical appliances into the AC output sockets on the rear panel of the inverter. Ensure the total power consumption of connected devices does not exceed the inverter's rated output (3500 VA / 2400 W).
- 5. Initial Power On:** After all connections are secure, switch the inverter ON using the front panel switch. Observe the display for operational status.

5. OPERATING MODES

The Kemot Prosinus 3500 operates in three primary modes:

- Emergency Power Supply Mode (UPS Mode):** In this mode, the unit continuously monitors the mains power. If mains power is present, it passes the AC power to the connected loads and simultaneously recharges the external battery. In the event of a power failure, the inverter automatically switches to battery power, converting 48V DC from the battery to 230V AC to maintain power to your devices.
- Charger Mode:** When mains power is available, the unit can operate solely as a battery charger, replenishing the external battery without providing AC output to loads (if the inverter function is switched off).
- Inverter Mode:** When mains power is not connected or the unit is operating purely from battery, it converts 48V DC from the external battery into 230V AC for connected appliances.

This inverter also features constant phase detection, which is crucial for appliances sensitive to phase, such as certain gas furnaces. The phase is maintained at a fixed position, regardless of whether the unit is powered by the grid or the battery.



Figure 5.1: The Kemot Prosinus 3500 provides stable power for sensitive appliances like gas furnaces.



Figure 5.2: The inverter connects to a battery and mains power to supply various appliances.

6. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your Kemot Prosinus 3500.

- **Cleaning:** Periodically clean the exterior of the unit with a soft, dry cloth. Ensure the ventilation openings are free from dust and debris to prevent overheating. Do not use liquid cleaners.
- **Battery Inspection:** Regularly inspect battery terminals for corrosion and ensure connections are tight. Check the battery's charge level and overall condition according to the battery manufacturer's guidelines.
- **Environment:** Ensure the installation environment remains dry, cool, and well-ventilated.
- **Cable Check:** Periodically check all power cables and battery cables for any signs of damage or wear. Replace damaged cables immediately.

7. TROUBLESHOOTING

If you encounter issues with your Kemot Prosinus 3500, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power output from inverter	Inverter is OFF; Battery discharged; Overload; Short circuit; Faulty connection.	Turn ON the inverter; Recharge or replace battery; Reduce load; Check for short circuits; Verify all connections.
Battery not charging	Mains power not connected; Mains power failure; Charger current switch set incorrectly; Faulty battery.	Connect mains power; Check mains supply; Ensure charger current switch (if present) is set correctly; Test or replace battery.
Overload alarm	Connected load exceeds inverter capacity.	Disconnect some appliances to reduce the load.
Unit overheating	Blocked ventilation; Excessive ambient temperature; Prolonged high load.	Clear ventilation openings; Ensure adequate airflow; Operate in a cooler environment; Reduce load.

If the problem persists after attempting these solutions, please contact customer support.

8. SPECIFICATIONS

Feature	Specification
Brand	Kemot
Model Name	Prosinus
Article Model Number	3500 (URZ3430)
Recommended Product Uses	Home emergency, sensitive electronics
Power Source	Battery powered
Power (Rated)	100 Watts (Output Power: 1E+2 Watts)

Feature	Specification
Battery Capacity	1 Unknown Modifier (Requires 48V DC external battery)
Color	Black
Item Weight	16.4 Kilograms
Efficiency	85 %
Manufacturer	KEMOT
Country of Origin	China
Date First Available	September 23, 2022

9. WARRANTY AND SUPPORT

The Kemot Prosinus 3500 comes with a **2-year warranty** from the date of purchase, covering manufacturing defects. Please retain your proof of purchase for warranty claims.

For technical support, troubleshooting assistance beyond this manual, or warranty service, please contact your retailer or the official Kemot customer service. Provide your product model number (Prosinus-3500/48 or URZ3430) and a detailed description of the issue when seeking support.

Related Documents - 3500

 <p>URZ3404 PROsinus-300 URZ3405 PROsinus-500 URZ3406 PROsinus-700 URZ3407 PROsinus-1200</p> <p>Emergency power supply device with pure sine wave and charging function</p> <p>Návod k obsluze Bedienungsanleitung Owner's manual Mode d'emploi Használati utasítás Instrukcja obsługi Gebruiksaanwijzing Инструкция по эксплуатации Manual de utilizare Руководство по эксплуатации Manual de utilizare Нáвod na použitie Инструкция по эксплуатации</p>	<p>KEMOT PROsinus Emergency Power Supply Device User Manual</p> <p>User manual for the KEMOT PROsinus series of emergency power supply devices with pure sine wave and charging function. Covers safety instructions, battery selection and safety, functions, features, product description, display explanation, operation, storage, cleaning, and specifications for models URZ3404, URZ3405, URZ3406, URZ3407.</p>
 <p>URZ3404 PROsinus-300 URZ3405 PROsinus-500 URZ3406 PROsinus-700 URZ3407 PROsinus-1200</p> <p>Emergency power supply device with pure sine wave and charging function</p> <p>Návod k obsluze Bedienungsanleitung Owner's manual Mode d'emploi Használati utasítás Instrukcja obsługi Gebruiksaanwijzing Инструкция по эксплуатации Manual de utilizare Руководство по эксплуатации Manual de utilizare Нáвod na použitie Инструкция по эксплуатации</p>	<p>KEMOT PROsinus Series Emergency Power Supply Device - User Manual</p> <p>Comprehensive user manual for KEMOT PROsinus series emergency power supply devices (URZ3404, URZ3405, URZ3406) with pure sine wave and charging function. Covers safety, installation, operation, features, and specifications.</p>
 <p>URZ3404 PROsinus-300 URZ3405 PROsinus-500 URZ3406 PROsinus-700 URZ3407 PROsinus-1200</p> <p>Emergency power supply device with pure sine wave and charging function</p> <p>Návod k obsluze Bedienungsanleitung Owner's manual Mode d'emploi Használati utasítás Instrukcja obsługi Gebruiksaanwijzing Инструкция по эксплуатации Manual de utilizare Руководство по эксплуатации Manual de utilizare Нáвod na použitie Инструкция по эксплуатации</p>	<p>KEMOT PROsinus Emergency Power Supply with Pure Sine Wave - User Manual</p> <p>Comprehensive user manual for KEMOT PROsinus series emergency power supply devices (URZ3404, URZ3405, URZ3406, URZ3407) featuring pure sine wave output and charging function. Includes safety instructions, battery selection, functions, features, product description, operation, maintenance, and specifications.</p>



Emergency power supply device
with pure sine wave and charging function

Model & obalce DE
Bedienungsanleitung DE
Owner's manual EN
Mode d'emploi FR
Használati útmutató HU
Naudojimo instrukcija LT
Gebruiksaanwijzing NL
Instrukcja obsługi PL
Manual de utilizare RO
Руководство по эксплуатации RU
Načítanie a používanie SK
Инструкция по эксплуатации UA

[KEMOT PROsinus URZ3404-URZ3407 Emergency Power Supply User Manual](#)

Comprehensive user manual for the KEMOT PROsinus series (URZ3404, URZ3405, URZ3406, URZ3407) emergency power supply devices. Learn about pure sine wave output, charging functions, safety precautions, operation, features, and technical specifications.



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[KEMOT Emergency Power Supply with Pure Sine Wave - User Manual](#)

Discover the KEMOT Emergency Power Supply devices featuring pure sine wave technology and charging functions. This comprehensive manual covers models URZ3404-LFP4, URZ3405-LFP4, and URZ3406-LFP4, providing essential safety, operation, and maintenance information.



Emergency power supply device
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Načítanie a používanie SK
Инструкция по эксплуатации UA

[KEMOT URZ3404-LFP4/URZ3405-LFP4/URZ3406-LFP4: Pure Sine Wave Emergency Power Supply Device with Charging Function](#)

Discover the KEMOT URZ3404-LFP4, URZ3405-LFP4, and URZ3406-LFP4 series emergency power supply devices. Featuring pure sine wave output and charging capabilities, these devices provide reliable backup power for household and office use. Learn about safety, operation, and specifications.