

Power Safe 12V 12ah

Exide Powersafe Plus 12V 12AH VRLA SMF Battery User Manual

Model: Power Safe 12V 12ah

INTRODUCTION

This manual provides essential information for the safe and efficient use of your Exide Powersafe Plus 12V 12AH VRLA SMF Battery. This sealed lead-acid battery is designed for reliable power backup in various applications, including UPS systems, mini inverters, and audio systems. It is maintenance-free and comes factory-charged, ready for immediate use. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of the battery.

PRODUCT OVERVIEW



Image 1: Front view of the Exide Powersafe Plus 12V 12AH VRLA SMF Battery. The label clearly shows "EXIDE POWERSAFE PLUS", "SEALED LEAD-ACID BATTERY", "12V 12AH", and model "EP 12-12". It also displays technical specifications for cyclic and float charging, and safety symbols.



Image 2: Top view of the Exide Powersafe Plus 12V 12AH VRLA SMF Battery, showing the sealed top surface with circular caps and the terminal connections.



Image 3: Angled view of the Exide Powersafe Plus 12V 12AH VRLA SMF Battery, providing a perspective of its compact form factor and terminal layout.

SAFETY PRECAUTIONS

- Always wear appropriate personal protective equipment (PPE) such as safety glasses and gloves when handling batteries.
- Do not short-circuit the battery terminals. This can cause severe burns, fire, or explosion.
- Keep the battery away from open flames, sparks, and heat sources.
- Do not disassemble, puncture, or damage the battery casing.
- Ensure adequate ventilation when charging or operating the battery.
- Keep out of reach of children.
- In case of accidental contact with battery acid, flush immediately with plenty of water and seek medical attention.

SETUP AND INSTALLATION

The Exide Powersafe Plus battery is factory-charged and ready for use. Follow these steps for proper installation:

1. **Unpacking:** Carefully remove the battery from its packaging. Inspect for any visible damage.
2. **Placement:** Place the battery in a cool, dry, and well-ventilated area. Ensure it is on a stable, level surface. Avoid direct sunlight or extreme temperatures.
3. **Connection:**
 - Identify the positive (+) and negative (-) terminals on the battery.
 - Connect the positive (+) terminal of the battery to the positive (+) terminal of your UPS, inverter, or audio system.
 - Connect the negative (-) terminal of the battery to the negative (-) terminal of your device.
 - Ensure all connections are tight and secure to prevent arcing or poor performance.
4. **Initial Charge (Optional):** Although factory-charged, a full initial charge before first use is recommended for optimal battery life, especially if the battery has been stored for an extended period. Refer to the "Charging" section for details.

OPERATING INSTRUCTIONS

Charging

This VRLA SMF battery requires specific charging parameters to ensure its longevity and performance. Use a compatible charger designed for 12V sealed lead-acid batteries.

- **Cyclic Use (Deep Discharge Applications):**
 - Charging Voltage: $14.7V \pm 0.1V$
 - Maximum Initial Current: 3.6A
 - Minimum Current: 1.2A
- **Float Use (Standby Applications, e.g., UPS):**
 - Charging Voltage: $13.7V \pm 0.1V$
 - Maximum Initial Current: 3.6A
 - Minimum Current: 1.2A
- **Temperature Compensation:** Adjust charging voltage by $-18mV/deg\ C/12V$ unit for cyclic use and $-15mV/deg\ C/12V$ unit for float use, relative to $25^{\circ}C$.
- Avoid overcharging or undercharging, as both can significantly reduce battery life.

Discharging

- Do not discharge the battery below its recommended minimum voltage (typically 10.5V for a 12V battery under load) to prevent irreversible damage.
- Avoid deep discharges whenever possible to maximize battery cycle life.

MAINTENANCE

The Exide Powersafe Plus is a Sealed Maintenance-Free (SMF) battery, meaning it does not require water topping-up. However, some general maintenance practices are recommended:

- **Cleaning:** Keep the battery casing and terminals clean and free from dust and corrosion. Use a dry cloth for cleaning. If corrosion is present on terminals, clean with a wire brush and a solution of baking soda and water, then rinse and dry thoroughly.

- **Terminal Connections:** Periodically check that terminal connections are tight and secure. Loose connections can cause overheating and power loss.
- **Temperature:** Operate the battery within the recommended ambient temperature range (20-30°C). Extreme temperatures can affect performance and lifespan.
- **Storage:** If storing the battery for an extended period, ensure it is fully charged and recharge it every 3-6 months to prevent self-discharge and sulfation. Store in a cool, dry place.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Battery not holding charge	<ul style="list-style-type: none">• Undercharging or overcharging• Battery end-of-life• Faulty charger	<ul style="list-style-type: none">• Verify charger voltage and current settings.• Replace battery if it has reached its service life.• Test charger with another battery or replace.
Low power output	<ul style="list-style-type: none">• Loose or corroded terminals• Battery partially discharged• Incorrect battery size for application	<ul style="list-style-type: none">• Clean and tighten terminals.• Fully charge the battery.• Ensure battery capacity matches device requirements.
Battery overheating during charge	<ul style="list-style-type: none">• Overcharging• High ambient temperature• Internal short circuit	<ul style="list-style-type: none">• Check charger settings; reduce charge current/voltage.• Move battery to a cooler, well-ventilated area.• Discontinue use and contact support if overheating persists.

SPECIFICATIONS

Feature	Detail
Brand	Generic (Exide Powersafe Plus Series)
Model	Power Safe 12V 12ah
Voltage	12 Volts
Battery Capacity	12 Amp Hours (12AH)
Battery Cell Composition	Lead Acid (VRLA SMF)
Product Dimensions (LxWxH)	15.1 x 6.5 x 9.4 cm
Item Weight	4 kg
Form Factor	Compact
Material	Polycarbonate (PC)
Operating Temperature	20-30°C (recommended)

WARRANTY INFORMATION

This Exide Powersafe Plus 12V 12AH VRLA SMF Battery comes with a**12-Month Warranty** from the date of purchase. The warranty covers manufacturing defects and material faults under normal use and service conditions. The warranty does not cover damages resulting from:

- Improper installation or connection.
- Misuse, abuse, or negligence.
- Overcharging or deep discharging.
- Unauthorized repairs or modifications.
- Damage due to external factors such as fire, flood, or other acts of nature.

Please retain your purchase receipt as proof of purchase for warranty claims.

SUPPORT AND CONTACT INFORMATION

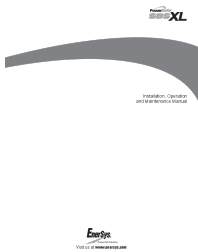

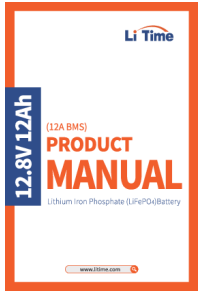
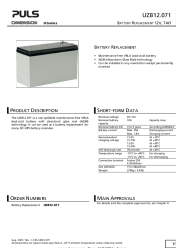
For technical assistance, warranty claims, or any other inquiries regarding your Exide Powersafe Plus battery, please contact your retailer or the manufacturer's authorized service center. Refer to the product packaging or the manufacturer's official website for the most up-to-date contact details.
Toll Free Helpline: 1800-203-5758 (as indicated on product label)
Website: www.exideindustries.com (as indicated on product label)



© 2024 All rights reserved. This manual is for informational purposes only.

Related Documents - Power Safe 12V 12ah

	<p>EnerSys PowerSafe V Front Terminal Battery Application Guide</p> <p>A comprehensive guide to EnerSys PowerSafe V front terminal battery blocs, detailing applications, operating conditions, charging parameters, and performance characteristics for reliable grid, grid assist, and unreliable grid applications.</p>
	<p>AGM VRLA Battery: Maintenance, Storage, Handling, and Charging Guide</p> <p>Comprehensive guide on AGM VRLA maintenance-free backup batteries, covering safe handling, storage, charging procedures, troubleshooting deep discharge, and proper disposal. Includes technical specifications and warnings.</p>

	<p>PowerSafe SBS XL Battery: Installation, Operation, and Maintenance Manual EnerSys</p> <p>Comprehensive guide for EnerSys PowerSafe SBS XL VRLA batteries, covering installation, operation, maintenance, safety, and disposal. Learn best practices for optimal performance and longevity.</p>
	<p>VCONN VCDC12150 12V 150AH Deep Cycle Battery Specifications and Performance</p> <p>Detailed specifications, performance characteristics, and charging procedures for the VCONN VCDC12150 12V 150AH deep cycle battery, designed for green energy systems and offering high cycle life and maintenance-free operation.</p>
	<p>Li Time 12.8V 12Ah LiFePO4 Battery Product Manual</p> <p>Comprehensive product manual for the Li Time 12.8V 12Ah Lithium Iron Phosphate (LiFePO4) battery, covering specifications, safety instructions, storage, capacity estimation, and series/parallel connection guidelines.</p>
	<p>PULS UZB12.071: 12V 7Ah VRLA AGM Battery for DC-UPS Systems</p> <p>Technical datasheet for the PULS UZB12.071, a maintenance-free 12V 7Ah VRLA AGM lead-acid battery. This document outlines product specifications, intended use for DC-UPS systems, installation guidelines, storage recommendations, and environmental considerations.</p>