

## Humsienk 29.2V 15A

# Humsienk 29.2V 15A LiFePO4 Battery Charger Instruction Manual

Model: 29.2V 15A

## 1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Humsienk 29.2V 15A LiFePO4 Battery Charger. This high-performance charger is specifically engineered for 24-volt LiFePO4 battery systems. It features an advanced cooling system to maintain optimal operating temperatures and built-in safety protection mechanisms to prevent common charging issues. Please read this manual thoroughly before use and retain it for future reference.

## 2. PRODUCT FEATURES

- **Voltage Compatibility:** Specifically engineered for 24V LiFePO4 batteries with 29.2V output voltage and 15A charging current.
- **Cooling System:** Built-in advanced cooling mechanism helps maintain optimal operating temperature during charging cycles.
- **Safety Features:** Multiple protection systems against overcharging, short circuit, and reverse polarity for secure operation.
- **Charging Performance:** Efficient charging algorithm ensures proper battery maintenance and longevity.
- **Smart Monitoring:** Real-time status indicators display charging progress and battery conditions.

## 3. PRODUCT COMPONENTS

# Simply Charging Status Monitor



Figure 1: Humsienk LiFePO4 Battery Charger with included cables and clamps.



Figure 2: DC Side Display of the charger, showing handle, cooling fan, LED display, DC port (non-detachable), and mounting holes. Dimensions are 2.32 inches (59 mm) depth, 4.67 inches (118.5 mm) width, and 6.93 inches (176 mm) height.

The HumsienK charger includes the main charging unit, AC input cable, and DC output cables with battery clamps. The main unit features an aluminum housing for heat dissipation, a cooling fan, and LED indicators for charging status. It also has a 110V/220V transfer switch for input voltage selection.

## 4. SETUP

1. **Unpack the Charger:** Carefully remove all components from the packaging.
2. **Select Input Voltage:** Ensure the 110V/220V transfer switch on the back of the charger is set to the correct voltage for your region (e.g., 110V for North America).
3. **Connect AC Power:** Plug the AC input cable into the charger's AC input port, then plug the other end into a grounded wall outlet.
4. **Connect to Battery:** Attach the red (+) battery clamp to the positive terminal of your 24V LiFePO4 battery and the black (-) battery clamp to the negative terminal. Ensure connections are secure and tight to prevent arcing or overheating.
5. **Placement:** Place the charger in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure the cooling fan is not obstructed.

# Ultimate Heat Dissipation

Humsienk 24V Battery Charger Enables Fast Charging Without Overheating.



Figure 3: LED Status Monitor indicating charging progress. Always On Green: Waiting for Charging. Red Flashing: Charging (<80%). Yellow Flashing: Charging (80%–90%). Green Flashing: Charging (90%–100%). Always On Green: Charging Completed.

Once connected, the charger will automatically begin the charging process. The LED indicators on the charger provide real-time status updates:

- **Power On:** A red LED (LED2) indicates the charger is powered on.
- **Charging:** Both red LEDs (LED1 and LED2) indicate the battery is charging. Refer to Figure 3 for detailed charging progress based on LED color and flashing patterns.
- **Full Charge:** A green LED (LED2) indicates the battery is fully charged.

The intelligent charging system optimizes the process to maintain battery life. Once fully charged, the charger will stop automatically.

## 6. SAFETY INFORMATION

# DC Side Display

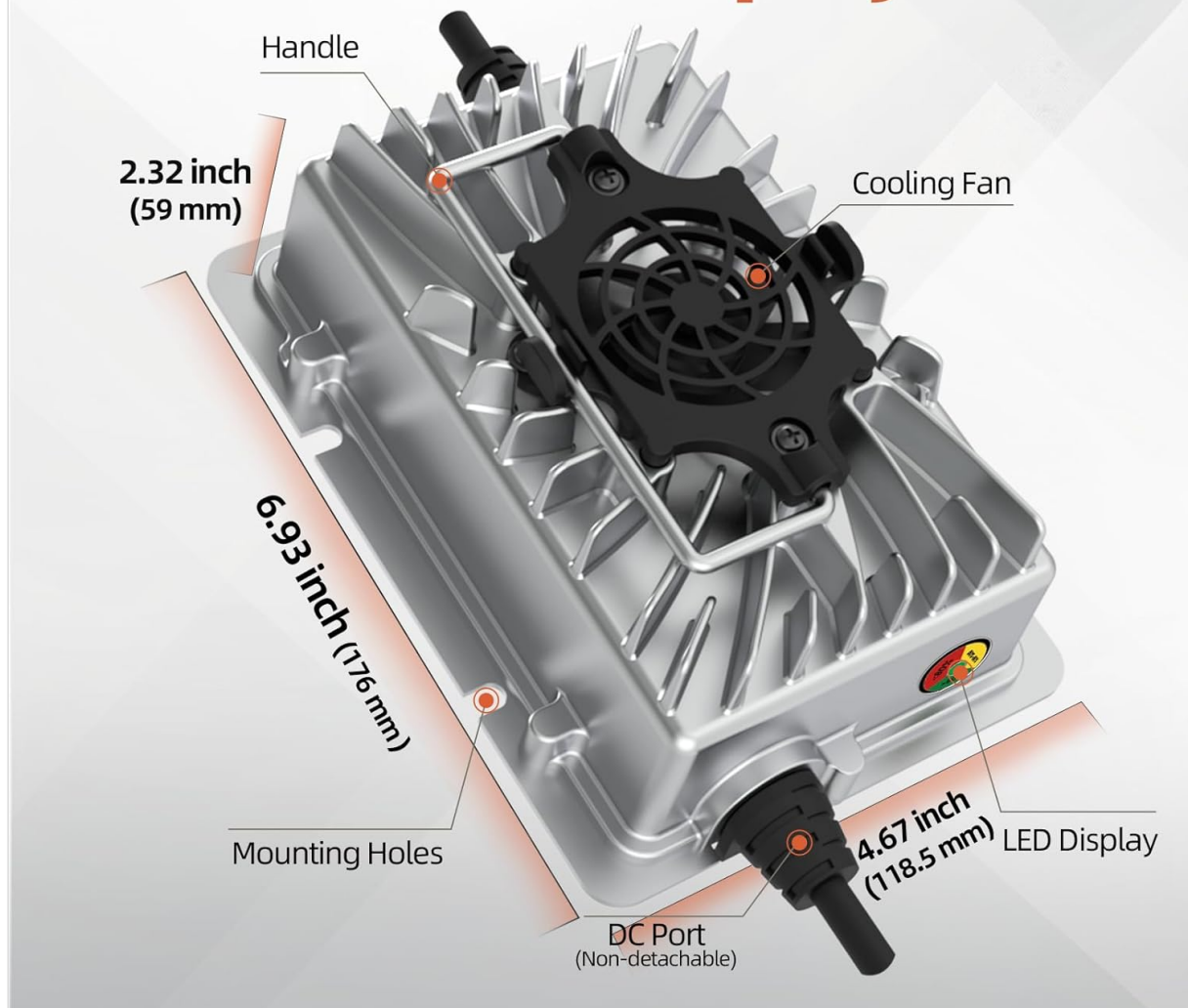


Figure 4: The charger features 4X Safety Protection: Over-voltage, Over-temperature, Short-circuit, and Reverse Polarity Connection.

- **Lithium Batteries Only:** This charger is designed exclusively for LiFePO4 batteries. Do not use with other battery types.
- **Read Instructions:** Always read the instruction manual carefully before charging.
- **Ventilation:** Ensure adequate ventilation during operation. Do not block the cooling fan or vents.
- **Indoor Use Only:** This charger is intended for indoor use only.
- **Guard Against Damp:** Protect the charger from moisture and water.
- **Secure Connections:** Always ensure tight and correct connections to battery terminals to prevent sparks or overheating.
- **Overheating:** If the charger or battery becomes excessively hot, disconnect immediately and contact support.
- **No Disassembly:** Do not attempt to disassemble or modify the charger, as this may cause electric shock, fire, or other damage and will void the warranty.

## 7. MAINTENANCE



# Industrial Standard

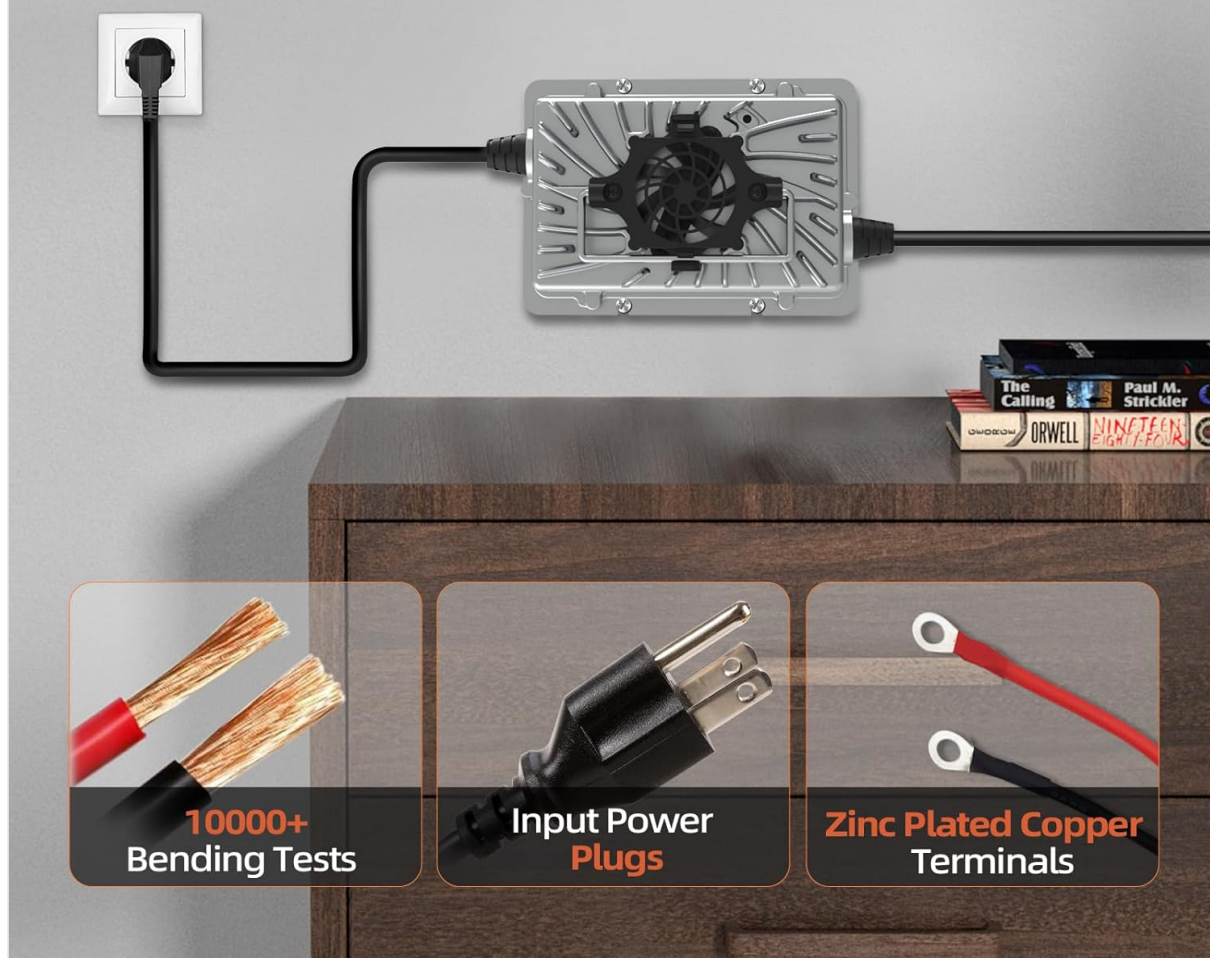


Figure 5: The charger's advanced cooling system ensures ultimate heat dissipation, enabling fast charging without overheating.

- **Cleaning:** Keep the charger clean and free from dust. Use a dry, soft cloth for cleaning.
- **Storage:** Store the charger in a cool, dry place when not in use.
- **Ventilation:** Regularly check that the cooling fan and vents are clear of obstructions to ensure proper heat dissipation.

## 8. SPECIFICATIONS

Feature	Detail
Brand	Humsienk
Product Dimensions	2.32 x 4.67 x 6.93 inches
Input Voltage	100-240 Volts AC
Output Voltage	29.2 Volts DC
Charging Current	15 Amps

Battery Type Compatibility	24V LiFePO4 (Lithium Iron Phosphate)
Color	Black
Manufacturer	Humsienk

## 9. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation included with your product or contact HumsienK customer service directly. Protection plans may be available for purchase separately to extend coverage beyond the standard warranty period.