LIMETA MC331

LIMETA MC331 200W 3-Channel Fast Charger User Manual

Intelligent Parallel Charging Hub for DJI Air 3/Air 3S Batteries

Introduction

The LIMETA MC331 is a high-performance 200W 3-channel fast charging hub designed specifically for DJI Air 3 and Air 3S intelligent flight batteries. This intelligent charger offers simultaneous parallel charging, dual USB-C input, and advanced battery management features, ensuring your drone batteries are ready for flight quickly and efficiently. It also includes a Polying App for smart control and a battery discharge mode for optimal battery health.

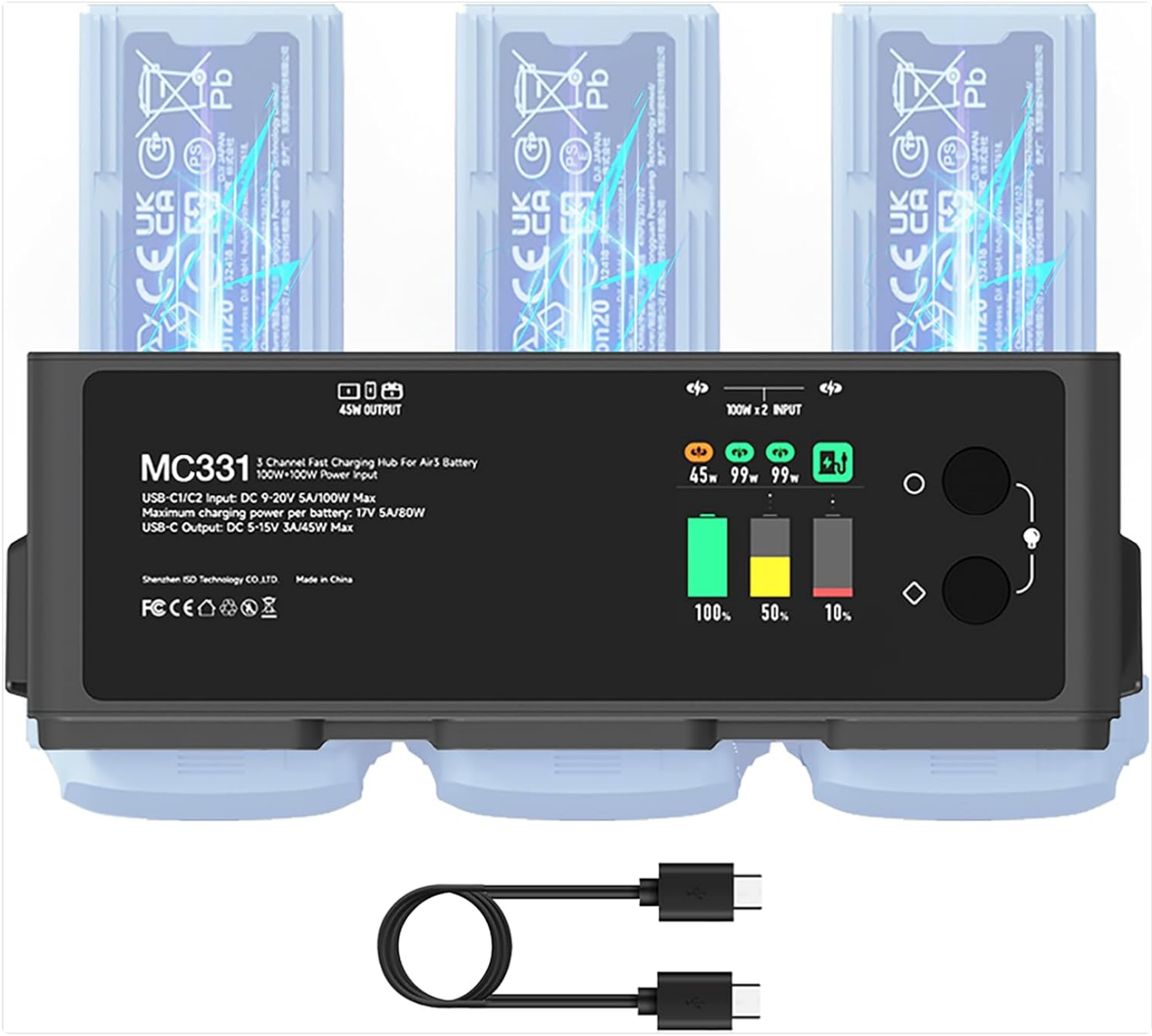


Image: The MC331 charger with three DJI Air 3 batteries, illustrating its multi-channel charging capability.

Product Features

- **200W Triple-Channel Fast Charging:** Capable of charging three DJI Air 3/Air 3S batteries simultaneously in approximately 70 minutes (fast mode). Features 80W single-battery output and 200W multi-battery output without power reduction.
- **Dual 100W USB-C Input + 45W Output:** Two 100W USB-C inputs provide a maximum total input of 200W. A dedicated 45W USB-C output allows charging of controllers or mobile phones concurrently with drone batteries.
- **Battery Power Management Expert:** Includes "Battery Master" functions to equalize uneven battery levels or aggregate power from multiple batteries into one for emergency flights.
- **Polying APP Smart Control:** Monitor battery voltage and temperature via the Polying APP (Bluetooth 5.0). The app supports firmware updates (e.g., v1.0.1.12), CSV report export, and beep sound disablement.
- **Discharge Mode & Safety Protections:** Features a discharge mode that transforms the charger into a power bank. Equipped with 5-layer protection (overvoltage, short-circuit, overheat) and an auto-shutdown function at 60°C.
- **Compact Aviation-Grade Design:** Constructed with aviation-grade aluminum, measuring 170.4×59.6×52.3mm and weighing 152g, designed to fit conveniently in a drone case. Includes a silent cooling fan and LED light for night operations.

- **Global Voltage & Warranty:** Supports 100-240V global voltage (compatible with US/UK/EU plugs). Comes with a 200W adapter and a 240W USB-C cable. Includes a 1-year warranty.



Image: A visual comparison of the MC331's advanced features against a typical DJI charger.

Package Contents

- LIMETA MC331 3-Channel Fast Charger
- 200W Power Adapter
- 240W USB-C Cable
- User Manual (this document)

Setup Guide

1. **Insert Batteries:** Gently slide your DJI Air 3/Air 3S intelligent flight batteries into the three designated charging slots on the MC331 charger. Ensure they are securely seated.

2. **Connect Power:** Connect the provided 200W power adapter to one of the dual USB-C input ports on the MC331 charger. For optimal performance, use both USB-C inputs if available.
3. **Download Polying App:** On your smartphone, download the "Polying" mobile application from your device's app store.
4. **Connect via Bluetooth:** Open the Polying app and follow the on-screen instructions to connect to your MC331 charger via Bluetooth. Ensure your phone is close to the device during the pairing process.
5. **Firmware Update:** After successful connection, check the Polying app for any available firmware updates. It is recommended to upgrade the firmware to the latest version (e.g., v1.0.1.12 or newer) to ensure optimal performance and compatibility.



Image: The MC331 charger with batteries and USB-C cables connected, demonstrating the setup.

Your browser does not support the video tag.

Video: A short guide demonstrating how to insert batteries, connect power, and set up the Polying app for the MC331 charger.

Operating Instructions

Charging Modes

The MC331 offers various charging modes to suit your needs. Use the touch buttons on the charger or the Polying app to select your desired mode:

- **Fast Charging Mode:** Charges batteries up to 95% capacity. This mode prioritizes speed, allowing the first battery to be fully charged in approximately 40 minutes.
- **Full Charging Mode:** Charges batteries to 100% capacity.
- **Storage Mode:** Charges or discharges batteries to approximately 60% capacity, which is ideal for long-term storage to maintain battery health.



Image: Visual representation of the different charging modes and their respective charging durations.

Display Screen Information

The integrated color screen provides real-time information about the charging process, including:

- Voltage (V)
- Battery Capacity (mAh)
- Temperature (°C)
- Power (W)
- Cycle Count



Image: The charger's display screen showing detailed battery information and the Polying app interface.

Battery Power Management

The MC331 features advanced battery management functions:

- **Collector Function (Aggregation):** In emergency situations or when a single battery is needed quickly, this function allows you to aggregate power from multiple batteries into one, ensuring enough charge for immediate flight.
- **Equalization Function:** Distributes battery power evenly among all connected batteries. This is convenient for on-the-go transportation or maintaining optimal battery health by balancing charge levels.

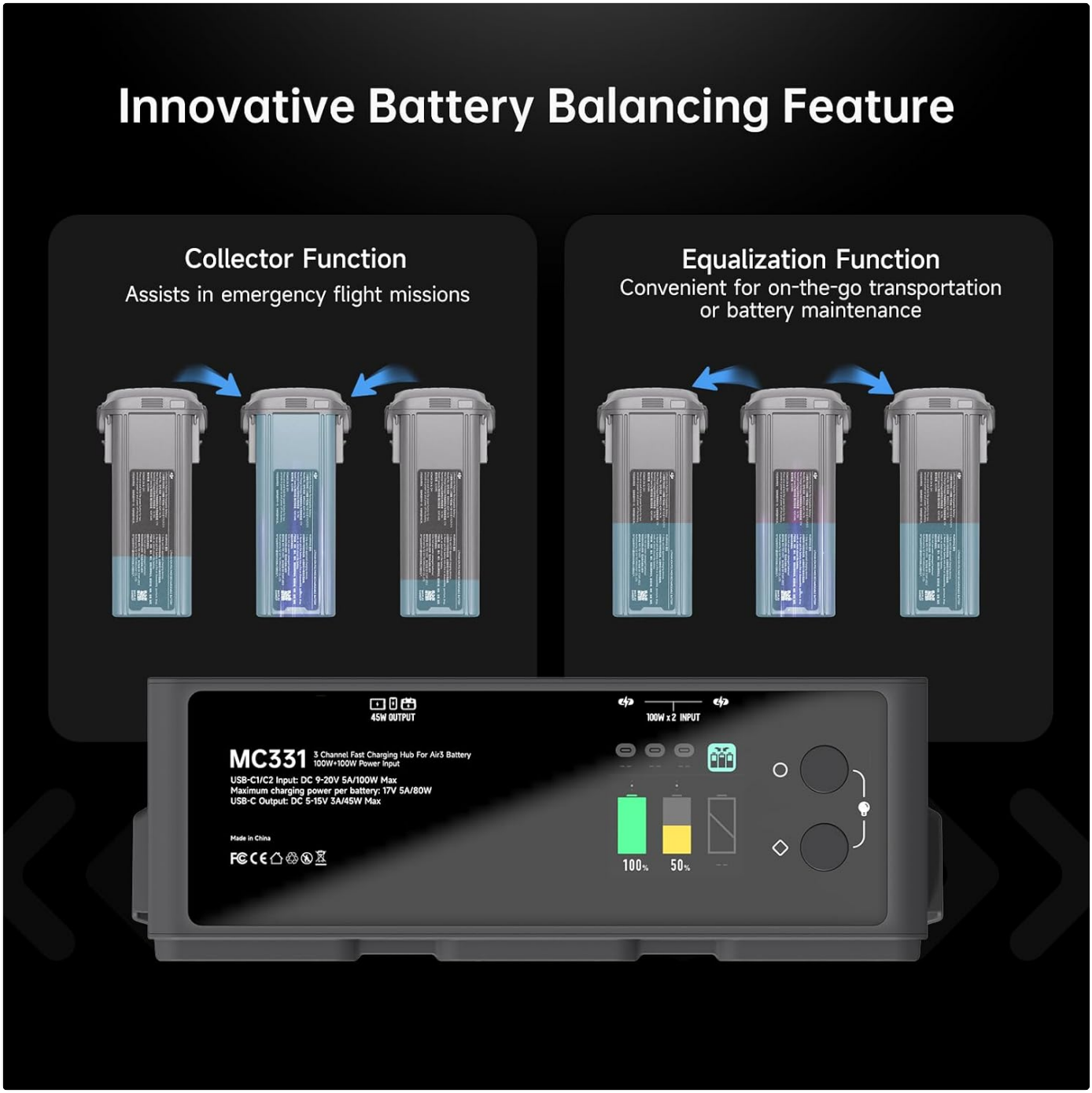


Image: Illustrations of the Collector and Equalization functions for battery management.

Power Bank Function (Discharge Mode)

The MC331 can act as a power bank. In discharge mode, it can provide up to 45W of power via its USB-C output, allowing you to charge your drone controller, smartphone, or other USB-C powered devices.



Image: The MC331 charger providing power to a smartphone, demonstrating its power bank capability.

Outdoor Features

For added convenience during outdoor use, the MC331 includes:

- **LED Light:** A built-in LED light facilitates operations in low-light conditions or at night.
- **Alarm Functions:** Provides audible alerts for various statuses or issues.

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Video: A detailed user guide demonstrating various features of the MC331, including charging modes, power bank function, and outdoor features.

Maintenance

To ensure the longevity and optimal performance of your LIMETA MC331 charger, follow these maintenance guidelines:

- **Cleaning:** Regularly wipe the charger's exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials. Ensure no dust or debris accumulates in the charging ports or ventilation areas.
- **Storage:** When not in use, store the charger in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity. If storing batteries with the charger, ensure they are in Storage Mode (60% charge) for optimal battery health.
- **Cable Care:** Handle USB-C cables with care. Avoid sharp bends or excessive pulling that could damage the connectors or wiring.
- **Ventilation:** Ensure the silent cooling fan is not obstructed during operation to prevent overheating.

Troubleshooting

Problem	Possible Cause	Solution
Charger not powering on.	No power supply or faulty cable/adapter.	Ensure the 200W power adapter is securely connected to both the charger and a working power outlet. Try a different USB-C cable or power source if available.
Batteries not charging.	Batteries not inserted correctly, charger in incorrect mode, or battery issue.	Re-insert batteries firmly. Check the display or Polying app to ensure the charger is in a charging mode (Fast or Full). Verify battery health.
Overvoltage warning (battery light blinks 3 times).	Outdated firmware.	Connect to the Polying app and update the charger's firmware to the latest version. This issue was addressed in firmware updates (e.g., v1.0.1.12).
Polying App not connecting.	Bluetooth disabled, app permissions, or distance.	Ensure Bluetooth is enabled on your smartphone. Grant necessary permissions to the Polying app. Keep your phone close to the charger during connection. Restart the app or charger if needed.
Charger overheating.	Poor ventilation or prolonged heavy use.	Ensure the charger is placed on a flat, stable surface with adequate airflow. Do not cover the ventilation openings. The charger has an auto-shutdown at 60°C for safety.

Specifications

Attribute	Detail
Model Number	MC331
Brand	LIMETA
Product Dimensions	2.3 x 6.73 x 2.05 inches (170.4 x 59.6 x 52.3mm)
Item Weight	11.3 ounces (152g)
Input Voltage	20 Volts (Dual 100W USB-C Input, Max 200W)
Output Voltage	11.1 Volts (80W single-battery, 200W multi-battery)
USB-C Output	DC 5-15V 3A/45W Max (Power Bank Function)

Attribute	Detail
Compatibility	DJI Air 3 / Air 3S Intelligent Flight Batteries
Safety Certification	CE
Country of Origin	China

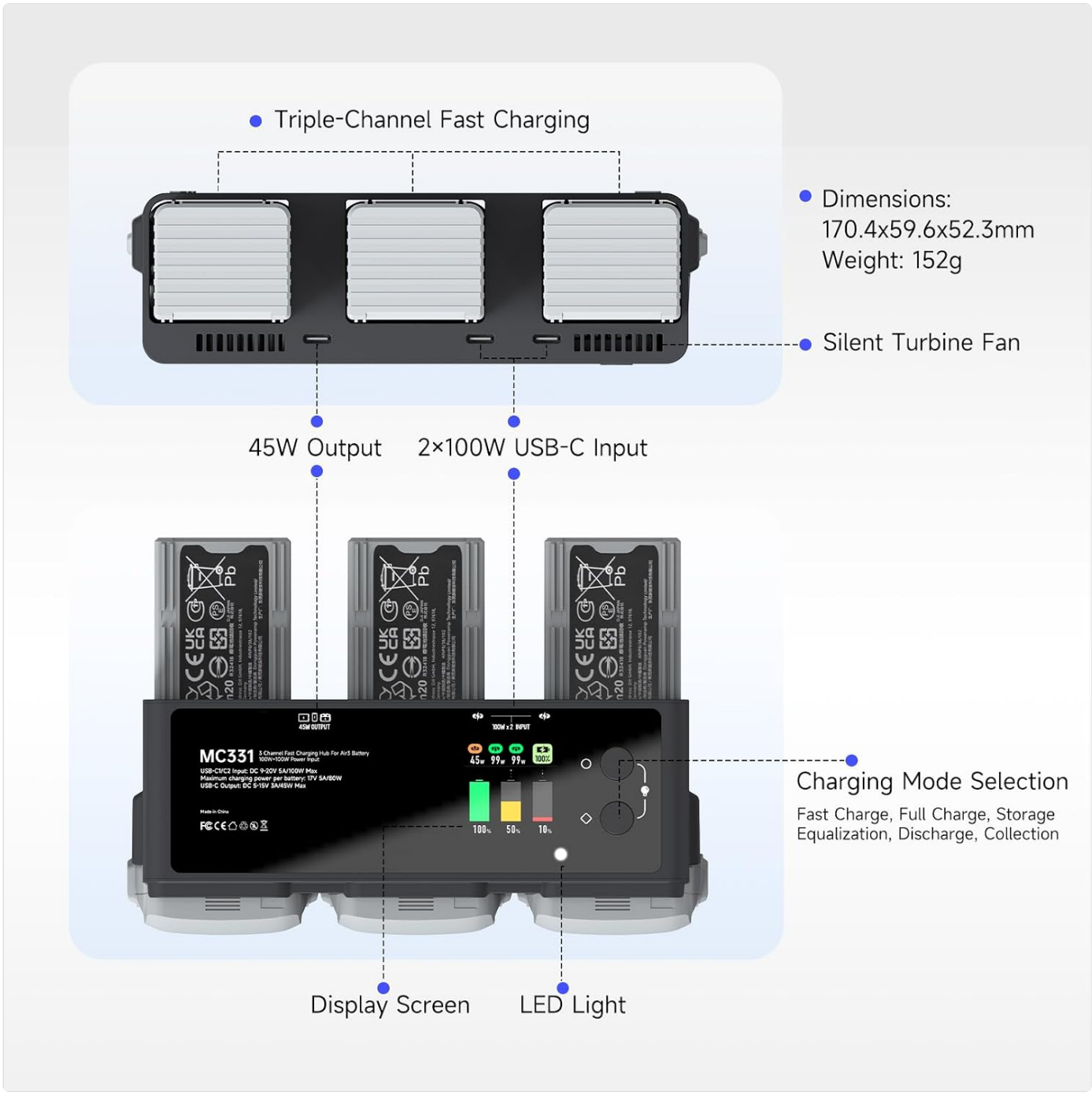


Image: Technical diagram highlighting the physical features and specifications of the MC331 charger.

Warranty and Support

The LIMETA MC331 200W 3-Channel Fast Charger comes with a **1-year warranty** from the date of purchase, covering manufacturing defects and malfunctions under normal use.

For technical support, troubleshooting assistance, or warranty claims, please contact LIMETA customer service through the retailer where you purchased the product or visit the official LIMETA website for contact information.

Please retain your proof of purchase for warranty validation.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question