

## GMKtec M3

# GMKtec M3 Mini PC User Manual

Model: M3

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your GMKtec M3 Mini PC. The GMKtec M3 is a compact and powerful desktop computer featuring an Intel Core i5-12450H processor, 32GB DDR4 RAM, and a 1TB NVMe SSD, designed for various computing tasks from daily work to multimedia consumption.



Image: The GMKtec M3 Mini PC, showcasing its compact design and various ports.

## **2. PACKAGE CONTENTS**

Please verify that all items listed below are included in your package:

- 1 x GMKtec Nucbox M3 Intel Core i5-12450H Mini PC Computer
- 1 x Power Adapter
- 1 x VESA Mount with Screws
- 1 x HDMI Cable
- 1 x User Manual

# RICH INTERFACE

For Business, Office, Gaming, Home

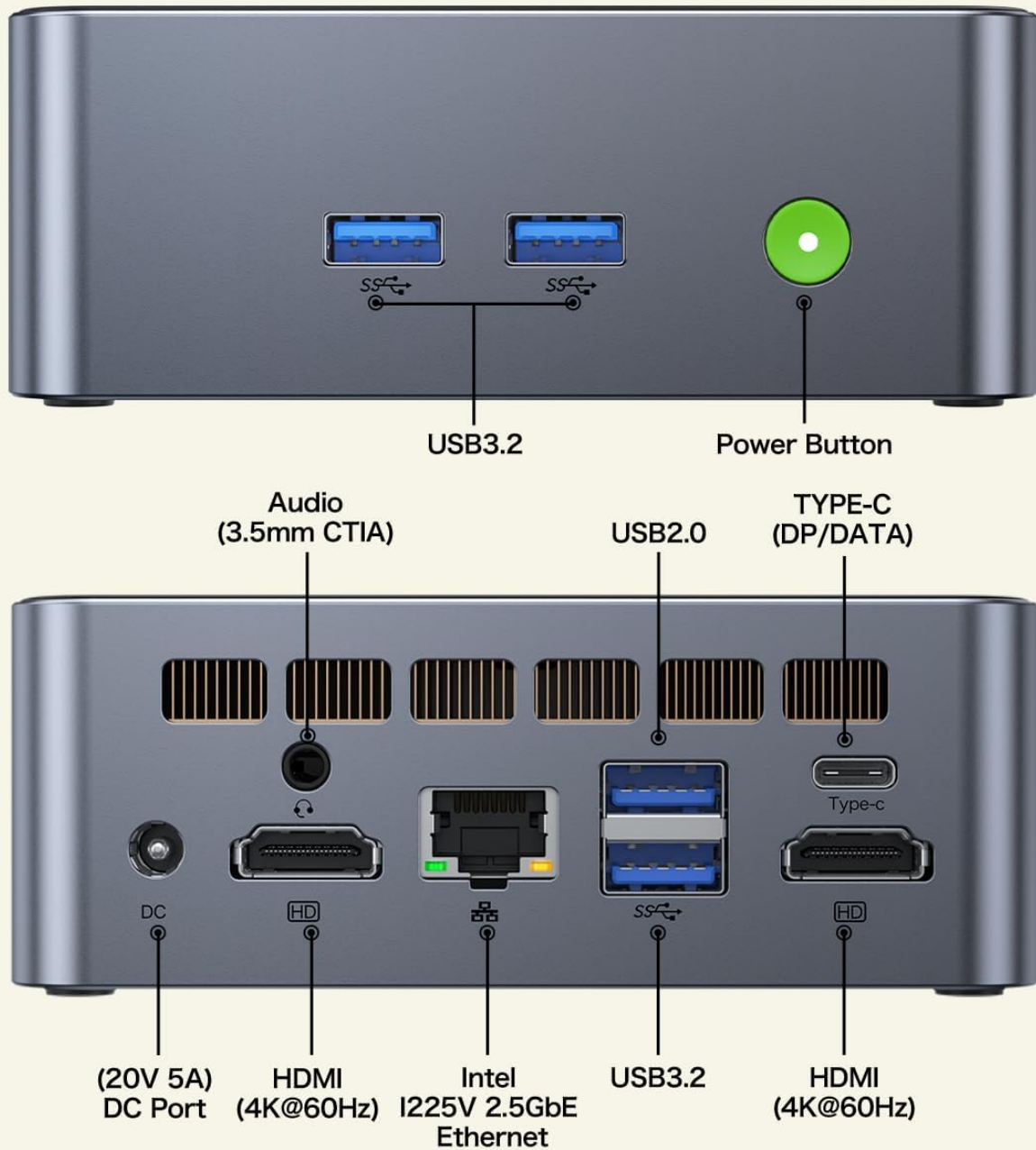


Image: Contents of the GMKtec M3 Mini PC retail box, including the PC, power adapter, VESA mount, HDMI cable, and user manual.

### 3. PRODUCT OVERVIEW AND FEATURES

The GMKtec M3 Mini PC is engineered for high performance and versatility. Key features include:

- **Processor:** Intel Core i5-12450H (up to 4.4 GHz, 8 Cores, 12 Threads)

- **Memory:** 32GB DDR4 Dual-Channel RAM (2x16GB)
- **Storage:** 1TB M.2 2280 NVMe SSD (PCIe 3.0), expandable with M.2 2242 SATA SSD up to 2TB
- **Graphics:** Intel Iris Xe Graphics G7 96EU GPU
- **Display Support:** Triple 4K UHD display output via 2x HDMI and 1x USB Type-C
- **Network:** 2.5Gbps LAN (RJ45), WiFi 6 (2.4G+5G), Bluetooth 5.2
- **Operating System:** Pre-installed Windows 11 Pro, compatible with Ubuntu and Linux

## Connectivity Ports

The Mini PC offers a rich set of ports for various peripherals and displays:

- 2 x USB 3.2 ports (front)
- 1 x Power Button (front)
- 1 x Audio (3.5mm CTIA) port (rear)
- 1 x USB 2.0 port (rear)
- 1 x USB Type-C (DP/DATA) port (rear)
- 2 x HDMI (4K@60Hz) ports (rear)
- 1 x Intel I225V 2.5GbE Ethernet port (rear)
- 1 x DC Port (20V 5A) (rear)

# RETAIL BOXED PACKAGE CONTENTS

1.Nucbox M3 Mini PC

2.HDMI Cable

3.Power Adapter & Cable

4.VESA Mount with Screws

5.User Manual



Image: Detailed view of the GMKtec M3 Mini PC's front and rear ports, including USB, HDMI, Ethernet, and power input.

## Advanced Networking

Experience faster and more stable network connections with:

- **Wi-Fi 6:** Provides higher bandwidth, lower latency, and wider coverage compared to Wi-Fi 5.
- **2.5Gbps Ethernet:** Offers significantly faster read-write and transmission speeds for wired connections.

# SUPER SPEED WI-FI 6

Tap into faster WiFi speeds with Dual-Band WiFi6 2\*2 2400Mbps



3 TIMES FASTER THAN WIFI5

Wi-Fi 6  Wi-Fi 5 



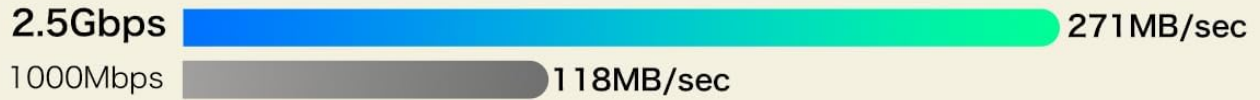
Image: Diagram illustrating the speed and coverage benefits of Wi-Fi 6 compared to Wi-Fi 5.



# 2.5G HIGH SPEED ETHERNET

Intel I225V Ethernet Controller Compatible with Linux  
Proxmox Etc.

## Read-write Speed



## Transmission Speed



Image: Visual representation of the 2.5Gbps LAN port and its read-write and transmission speeds.

## 4. SETUP

### Connecting Your Mini PC

1. **Power Connection:** Connect the power adapter to the DC port on the rear of the Mini PC and then to a power outlet.

2. **Display Connection:** Connect your monitor(s) to the HDMI ports or the USB Type-C port using the provided HDMI cable or a compatible Type-C to display cable. The Mini PC supports up to three 4K displays simultaneously.
3. **Peripherals:** Connect your keyboard, mouse, and other USB devices to the available USB 3.2 or USB 2.0 ports.
4. **Network Connection:** For a wired connection, connect an Ethernet cable from your router or modem to the 2.5GbE LAN port. For wireless, ensure your Wi-Fi network is active.



Image: Illustration of the GMKtec M3 Mini PC connected to three external monitors for a triple screen display setup.

## VESA Mount Installation

The GMKtec M3 Mini PC comes with a VESA mount, allowing you to attach it to the back of a compatible monitor or to a wall, saving desk space.

1. Attach the VESA mount bracket to the back of your monitor or desired surface using the provided screws.
2. Slide the Mini PC onto the mounted bracket until it clicks securely into place.



Image: Depiction of the GMKtec M3 Mini PC in both desktop placement and VESA mount installation configurations.

## 5. OPERATING INSTRUCTIONS

### Powering On/Off

- **To Power On:** Press the power button located on the front of the Mini PC. The power indicator light will illuminate.
- **To Power Off:** For Windows, click the Start button, then Power > Shut down. Alternatively, press and hold the power button for 4-5 seconds to force a shutdown (use only when necessary).

### Initial Setup (Windows 11 Pro)

Upon first boot, follow the on-screen prompts to complete the Windows 11 Pro setup, including region, keyboard layout, network connection, and user account creation.

### BIOS Access

To access the BIOS settings, power on the Mini PC and repeatedly press the **DEL** key on your keyboard until the



BIOS menu appears. This allows configuration of boot options, hardware settings, and more.

## 6. MAINTENANCE AND UPGRADES

### Storage and Memory Upgrades

The GMKtec M3 Mini PC supports user upgrades for both RAM and storage:

- **RAM:** Two SO-DIMM slots support DDR4 3200MHz memory, with a maximum capacity of 64GB (2x32GB).
- **SSD:** The pre-installed 1TB PCIe 3.0 M.2 2280 NVMe SSD can be upgraded to a maximum of 2TB. An additional M.2 2242 SATA slot is available for further storage expansion up to 2TB.

To perform upgrades, carefully remove the screws and the bottom cover of the Mini PC. Refer to the internal layout diagram for component locations.



Image: Diagram showing how to remove the bottom cover and access the SO-DIMM RAM slots and M.2 NVMe SSD slot for DIY upgrades.

### Cooling System

The Mini PC features an efficient cooling system with superconducting copper twin turbine pipes and a strong cooling fan to prevent overheating and ensure stable performance.

- Ensure proper airflow around the device by keeping vents clear of obstructions.
- Regularly clean dust from the exterior vents using compressed air to maintain optimal cooling performance.

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2.HDMI Cable

4.VESA Mount with Screws



Image: Exploded view highlighting the strong cooling fan and heat dissipation components within the GMKtec M3 Mini PC.

## 7. TROUBLESHOOTING

If you encounter issues with your GMKtec M3 Mini PC, please refer to the following common troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to both the Mini PC and a working power outlet. Try a different outlet if available.
- **No Display:** Verify that the HDMI or USB Type-C cable is firmly connected to both the Mini PC and the monitor. Check that the monitor is powered on and set to the correct input source. Try a different cable or monitor if possible.
- **No Internet Connection:** For wired connections, ensure the Ethernet cable is properly connected and your router/modem is working. For Wi-Fi, check if Wi-Fi is enabled in the operating system and that you are connected to the correct network with the correct password.
- **System Unresponsive:** If the system freezes, press and hold the power button for 4-5 seconds to force a shutdown, then restart the device.
- **Peripheral Not Detected:** Try connecting the peripheral to a different USB port. Ensure drivers are installed if required by the peripheral.

For persistent issues, please contact GMKtec support as detailed in the Warranty & Support section.

## 8. SPECIFICATIONS

Detailed technical specifications for the GMKtec M3 Mini PC:

Feature	Specification
Processor	Intel Core i5-12450H (4.4 GHz max turbo frequency, 8 Cores, 12 Threads)
RAM	32GB DDR4 (2x16GB)
Memory Type	DDR DRAM
Memory Slots Available	2 (SO-DIMM)
Hard Drive	1TB Dual SSD PCIe 3.0 M.2 2280 / M.2 2242 SATA
Hard Drive Interface	PCIe x 16
Graphics Coprocessor	Intel Iris Xe Graphics G7 96EU GPU / Intel UHD Graphics 1.20 GHz
Card Description	Integrated
Max Screen Resolution	5120 x 2880 Pixels
Wireless Type	2.4 GHz / 5 GHz / 5.8 GHz Radio Frequency, 802.11a/b/g/n/ac, Bluetooth 5.2
Number of USB 2.0 Ports	2
Number of USB 3.0 Ports	4
Operating System	Windows 11 Pro, Compatible with Ubuntu and Linux
Item Weight	2.86 pounds
Product Dimensions	5.2 x 4.92 x 2.28 inches
Color	Black

## 9. WARRANTY AND SUPPORT

GMKtec is committed to providing reliable products and professional after-sales service.

### Warranty Information

GMKtec offers a 1-year limited warranty for each Mini PC, effective from the date of purchase. This warranty covers defects due to design and workmanship.

### Customer Support

For any inquiries, technical assistance, or warranty claims, please contact GMKtec support:

- **Email Support:** Send an email to [support@gmktec.com](mailto:support@gmktec.com). Our after-sales team is available 24/7.
- **Amazon Support:** For purchases made on Amazon, you can contact us through your Amazon account.

Navigate to "Your Orders," find your purchase, and select "Ask Product Question."

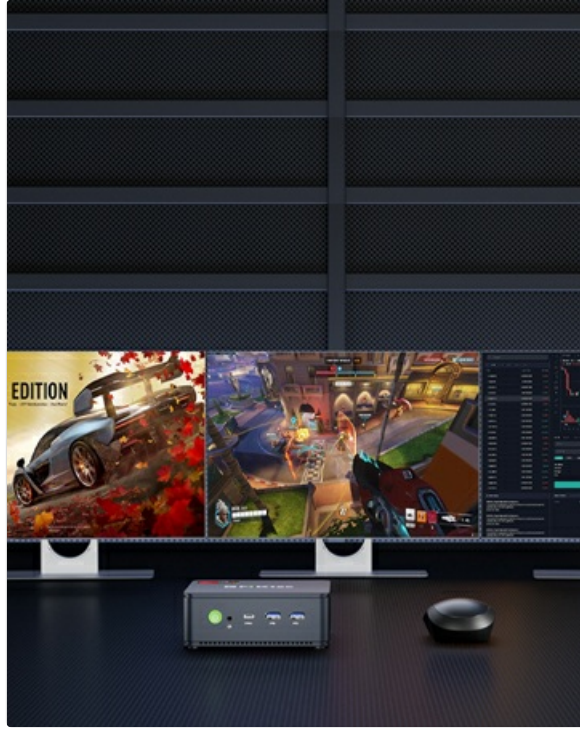


Image: Information on how to contact GMKtec for support via email and Amazon.