

GMKtec M6 Ultra

GMKtec M6 Ultra Mini PC User Manual

Model: M6 Ultra

1. INTRODUCTION

This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your GMKtec M6 Ultra Mini PC. Please read this guide thoroughly before using the device to ensure optimal performance and longevity.



Image 1.1: Front and side view of the GMKtec M6 Ultra Mini PC, showcasing its compact design and various ports.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- GMKtec Nucbox M6 Ultra AMD Ryzen 5 7640HS Mini PC Computer
- HDMI Cable
- Power Supply & Cable
- User Manual
- VESA Mount and Screws



Image 2.1: Visual representation of the items included in the GMKtec M6 Ultra Mini PC package, including the mini PC, power adapter, user manual, HDMI cable, and VESA mount with screws.

3. PRODUCT OVERVIEW

3.1 Key Features

- **Processor:** AMD Ryzen 5 7640HS (6 Cores, 12 Threads, up to 5.0 GHz)
- **Graphics:** Integrated AMD Radeon 760M (8 CUs, up to 2600 MHz)
- **Memory:** 16GB DDR5 RAM (expandable to 128GB)
- **Storage:** 512GB PCIe 3.0 M.2 2280 SSD (supports dual slot expansion to PCIe 4.0 8TB SSD)
- **Network:** Dual 2.5GbE RJ45 LAN, WiFi 6, Bluetooth 5.2
- **Display Output:** Triple display support (8K@60Hz via USB4, 4K@60Hz via HDMI 2.0 and DisplayPort)
- **Operating System:** Windows 11 Pro

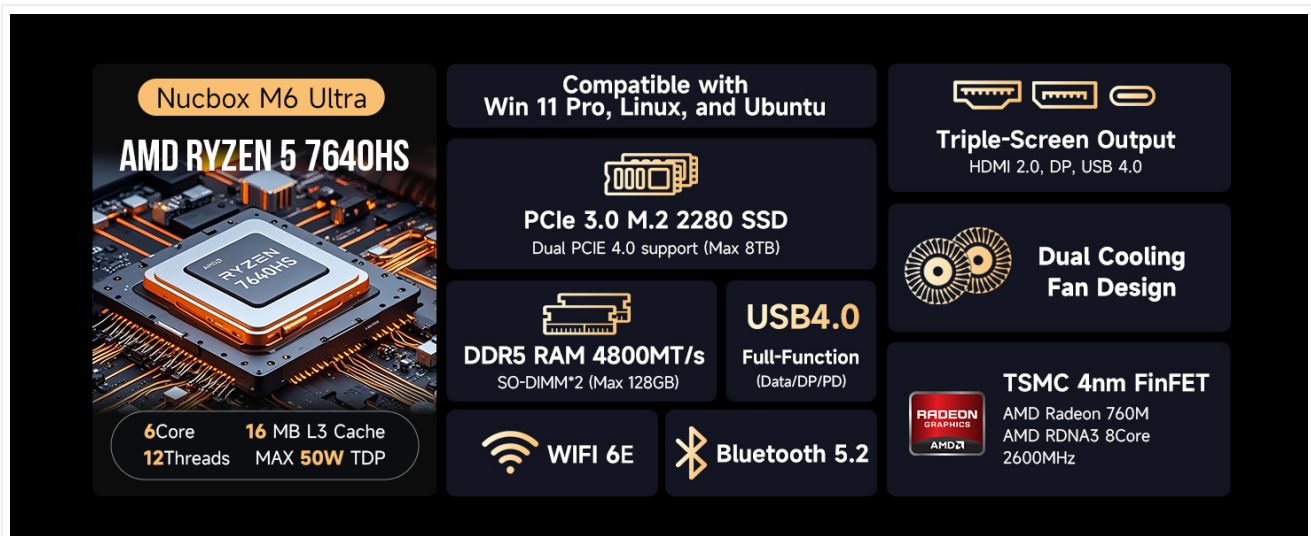


Image 3.1: Diagram illustrating the key features of the GMKtec M6 Ultra, including its AMD Ryzen 5 7640HS processor, triple-screen output, dual cooling fan design, DDR5 RAM, PCIe SSD, USB4, WiFi 6, and Bluetooth 5.2.

3.2 Ports and Connections

The GMKtec M6 Ultra Mini PC offers a comprehensive set of ports for various peripherals and displays:

- 3 x USB 3.2 (Gen2) ports
- 1 x USB 2.0 port
- 1 x HDMI 2.0 port (4K@60Hz)
- 1 x USB4 port (PD/DP/DATA)
- 1 x DisplayPort
- 1 x Audio 3.5mm (Headphone & Microphone combo)
- 2 x 2.5GbE RJ45 LAN ports
- 1 x DC Power Port
- Security lock slot



Image 3.2: Detailed diagram of the GMKtec M6 Ultra Mini PC's rich interface, highlighting the location and type of each port, including USB, HDMI, DisplayPort, USB4, LAN, and audio jacks.

4. SETUP INSTRUCTIONS

Follow these steps to set up your GMKtec M6 Ultra Mini PC:

1. **Connect to a Display:** Connect your monitor or TV to the Mini PC using an HDMI, DisplayPort, or USB4 cable. The Mini PC supports up to three displays simultaneously.
2. **Connect Peripherals:** Plug in your keyboard, mouse, and any other USB devices into the available USB ports.
3. **Connect to Network (Optional):** For a wired connection, connect an Ethernet cable to one of the 2.5GbE RJ45 LAN ports. For wireless, ensure your WiFi network is available during initial setup.
4. **Connect Power:** Connect the power adapter to the DC Power Port on the Mini PC, then plug the power cable into an electrical outlet.
5. **Power On:** Press the power button located on the front of the Mini PC. The system will boot up.
6. **Initial Windows Setup:** Follow the on-screen instructions to complete the Windows 11 Pro setup, including language, region, network connection, and user account creation.



Image 4.1: The GMKtec M6 Ultra Mini PC connected to three external displays, demonstrating its triple-screen output capability via USB4, HDMI, and DisplayPort.

5. OPERATING INSTRUCTIONS

5.1 Basic Operation

- **Power On/Off:** Press the power button once to turn on the PC. To turn off, use the Windows Shut Down option or press and hold the power button for 5 seconds.
- **Restart:** Use the Windows Restart option.
- **Sleep Mode:** Use the Windows Sleep option or briefly press the power button when the PC is on.

5.2 Network Connectivity

The Mini PC supports both wired and wireless network connections.

- **Wired LAN:** Connect an Ethernet cable to either of the 2.5GbE RJ45 ports for high-speed internet access.
- **WiFi 6:** Access network settings in Windows to connect to available WiFi 6 (802.11ax) networks for fast, low-latency wireless connectivity.
- **Bluetooth 5.2:** Pair Bluetooth-enabled devices such as headphones, mice, or keyboards through Windows Bluetooth settings.



Image 5.1: The GMKtec M6 Ultra Mini PC demonstrating its support for high-speed wireless connections (WiFi 6 and Bluetooth 5.2) and wired 2.5G LAN, with comparative speed indicators.

6. MAINTENANCE

Proper maintenance ensures the longevity and performance of your Mini PC.

6.1 Cleaning

- Regularly clean the exterior of the Mini PC with a soft, dry cloth.
- Use compressed air to gently clear dust from ventilation openings to maintain optimal airflow and cooling.

6.2 Upgrades (RAM & SSD)

The GMKtec M6 Ultra is designed for easy upgrades of RAM and SSD storage.

- **RAM:** Supports dual-channel SO-DIMM DDR5 RAM, expandable up to 128GB (Max 64GB per slot).
- **SSD:** Features dual M.2 2280 slots, supporting PCIe 3.0 and PCIe 4.0 SSDs, with a maximum capacity of 8TB.

Refer to the detailed instructions in the included user manual for specific steps on how to access and upgrade these components. Ensure the device is powered off and unplugged before performing any internal maintenance or upgrades.



Image 6.1: Internal view of the GMKtec M6 Ultra Mini PC, illustrating the accessible slots for DDR5 RAM and M.2 2280 SSDs, designed for easy installation and disassembly for upgrades.

6.3 Cooling System

The Mini PC incorporates a dual-fan cooling system to manage thermal performance effectively.

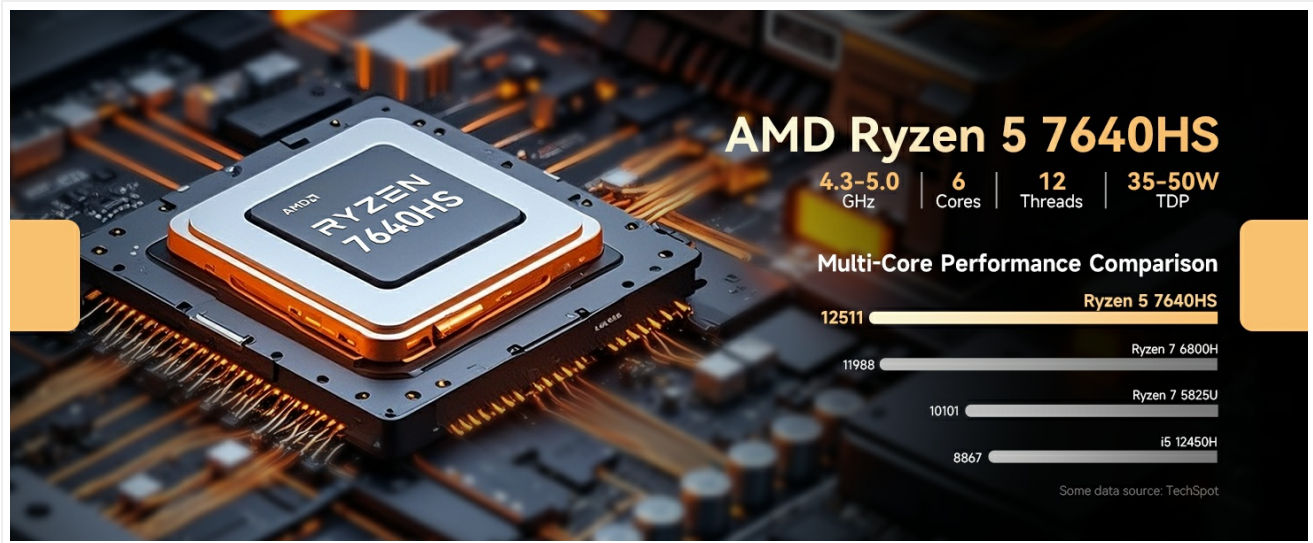


Image 6.2: Diagram showing the dual-fan cooling system design of the GMKtec M6 Ultra Mini PC, highlighting the CPU thermal management system and the SSD/DDR cooling fan for efficient heat dissipation.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your Mini PC.

Problem	Possible Cause	Solution
PC does not power on	No power supply; faulty power adapter/cable	Ensure power cable is securely connected to both the PC and the outlet. Test the outlet with another device.

Problem	Possible Cause	Solution
No display output	Incorrect display cable connection; wrong input selected on monitor	Check display cable connections. Ensure the monitor is set to the correct input source (HDMI, DP, USB-C). Try a different display cable or port.
No internet connection (wired)	Ethernet cable disconnected; router issue	Verify Ethernet cable is securely plugged into both the PC and the router. Restart your router/modem.
No internet connection (wireless)	WiFi disabled; incorrect password; signal interference	Ensure WiFi is enabled in Windows settings. Re-enter WiFi password. Move closer to the router or reduce interference.
Peripherals (keyboard/mouse) not working	Loose USB connection; driver issue; low battery (wireless)	Try a different USB port. Check device manager for driver issues. Replace batteries for wireless devices.
System runs slowly or freezes	Too many applications running; insufficient RAM; overheating	Close unnecessary applications. Check task manager for resource usage. Ensure proper ventilation and clean dust from vents.

8. SPECIFICATIONS

Detailed technical specifications for the GMKtec M6 Ultra Mini PC:

Feature	Detail
Processor	AMD Ryzen 5 7640HS (6 Cores, 12 Threads, 4.3-5.0 GHz)
Graphics Coprocessor	AMD Radeon 760M (Integrated)
RAM	16GB DDR5 (4800 MHz), expandable to 128GB
Storage	512GB SSD (M.2 2280 PCIe 3.0), dual slot support for PCIe 4.0 up to 8TB
Operating System	Windows 11 Pro
Wireless Connectivity	WiFi 6 (2.4 GHz, 5 GHz, 5.8 GHz, 802.11ax), Bluetooth 5.2
Wired LAN	2 x 2.5GbE RJ45 ports
USB Ports	3 x USB 3.2 (Gen2), 1 x USB 2.0, 1 x USB4 (PD/DP/DATA)
Video Output	1 x HDMI 2.0 (4K@60Hz), 1 x DisplayPort, 1 x USB4 (8K@60Hz)
Audio Port	1 x 3.5mm (HP&MIC)
Dimensions (LxWxH)	5 x 2 x 5 inches
Item Weight	3.54 pounds

9. WARRANTY AND SUPPORT

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

9.1 Warranty Information

GMKtec offers a **1-year limited warranty** for each Mini PC, effective from the date of purchase. This warranty covers


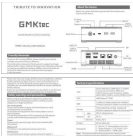



defects due to design and workmanship. Please retain your proof of purchase for warranty claims.

9.2 Customer Support

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

- **Amazon Support:** Log in to your Amazon account, navigate to 'Your Orders', and select 'Ask Product Question' for your purchase.
- **After-Sales Team:** Send an email to support@gmktec.com for 24/7 customer support.

Related Documents - M6 Ultra

	<p>GMKtec M6 Mini PC User Manual</p> <p>Comprehensive user manual for the GMKtec M6 Mini PC, detailing specifications, setup, operation, and troubleshooting for this compact desktop computer powered by AMD R5 6600H.</p>
	<p>GMKtec M6 Ultra User Manual: Features, Specifications, and Setup Guide</p> <p>Comprehensive user manual for the GMKtec M6 Ultra Mini PC, detailing its features, technical specifications, safety precautions, connection steps, BIOS settings, power management, and compliance information.</p>
	<p>GMKtec NUCBOX7/7S User Manual</p> <p>User manual for the GMKtec NUCBOX7 and NUCBOX7S mini PCs, detailing specifications, safety precautions, connection steps, and after-sales support.</p>
	<p>GMKtec NUCBOX M5 PLUS User Manual and Safety Guide</p> <p>Comprehensive user manual for the GMKtec NUCBOX M5 PLUS mini PC, detailing setup, specifications, safety precautions, and warranty information. Learn how to connect your device, access BIOS, and ensure safe operation.</p>
	<p>Instrukcja obsługi GMKtec NUCBOX K11</p> <p>Kompleksowa instrukcja obsługi mini PC GMKtec NUCBOX K11, zawierająca szczegółowe informacje o konfiguracji, specyfikacjach technicznych, środkach ostrożności, gwarancji i zgodności z normami środowiskowymi. Idealna dla użytkowników poszukujących wsparcia technicznego i optymalizacji urządzenia.</p>
	<p>GMKtec Mini PC Instrukcja Obsługi i Specyfikacje Techniczne</p> <p>Kompleksowa instrukcja obsługi i przegląd specyfikacji technicznych dla serii komputerów GMKtec Mini PC, obejmująca modele takie jak NUCBOX, G-Series, M-Series, K-Series, Evo-Series i inne.</p>

