

## GMKtec GMKtec NUCBOX G9

# GMKtec G9 Mini PC User Manual

Model: GMKtec NUCBOX G9

## INTRODUCTION

The GMKtec G9 Mini PC is a versatile and compact computing solution designed for various applications, including daily tasks, office work, home entertainment, and network-attached storage (NAS) functionalities. It features an Intel N150 processor, multiple M.2 NVMe slots for extensive storage, and dual-boot capabilities with Windows 11 Pro and Linux. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your GMKtec G9 Mini PC.



Image: The GMKtec G9 Mini PC, a compact computing device.

## SETUP

### 1. Unpacking and Initial Inspection

Carefully remove the Mini PC and all accessories from the packaging. Inspect for any visible damage. Ensure all components listed in the packing list are present.

### 2. Connecting Peripherals

- **Power Adapter:** Connect the power adapter to the DC-in port on the Mini PC and then to a power outlet.
- **Display:** Connect your monitor(s) to the HDMI ports or the Type-C port (with DP support) using appropriate cables. The device supports triple 4K @ 60 Hz display output.
- **Keyboard and Mouse:** Connect your USB keyboard and mouse to the available USB 3.2 ports.
- **Network:** For wired network access, connect an Ethernet cable to one of the 2.5GbE RJ45 ports. For wireless connectivity, ensure your Wi-Fi network is available.
- **Audio:** Connect speakers or headphones to the 3.5mm audio port if needed.

# NEW TWIN LAKE INTEL N150 2025 NEW RELEASE

(4 Core/4 Threads)

intel

 Intel Graphics up to  
1000MHz

 **QUAD STORAGE**  
(4\*M.2 PCIE Slots, Max 16TB Total)

 **12GB**  
LPDOR5 4800MT/S

  
Intel i226V DUAL NIC  
(RJ45)

 **WiFi6**  
(3x the speed of WiFi 5)

 **Bluetooth5.2**  
(Faster Stable Connection)

  
**Windows 11 Pro**

  
**Linux**

**Dual Boot System**  
Default Boot to Windows 11 Pro, can be switched to Linux

**HDMI\*2+ USB-C\*1**  
Triple Screen 4k output



**GMKtec Nucbox G9**



Image: An overview of the GMKtec G9 Mini PC's features, including processor, graphics, storage, RAM, and connectivity options.

### 3. Powering On

Press the power button located on the front of the Mini PC. The system will boot up. The first boot may take longer as it configures the operating system.

## 4. Dual Boot System

The G9 Mini PC comes pre-installed with a dual-boot system, featuring Windows 11 Pro on the SSD and Linux (version 24.10 or higher recommended) on the 64GB eMMC memory. The default boot is typically to Windows 11 Pro. You can switch between operating systems during startup via the boot menu (consult your system's BIOS/UEFI settings for specific key presses, often F7 or F11).

# DUAL BOOT WINDOWS & LINUX



Image: Visual representation of the dual-boot capability, showing Windows and Linux operating systems side-by-side on monitors.

## OPERATING INSTRUCTIONS

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### 1. General Usage

Once booted, operate the Mini PC as you would any standard desktop computer. Use your connected keyboard and mouse to navigate the operating system interface. For optimal performance, ensure all drivers are up to date.

## **2. Network Attached Storage (NAS) Functionality**

The G9 Mini PC is designed with 4 PCIe M.2 2280 slots, allowing it to function as a powerful NAS. While GMKtec does not provide NAS software, you can install third-party NAS software (e.g., TrueNAS, OpenMediaVault) to create a centralized storage network for file backup, sharing, and media streaming. The dual 2.5GbE Ethernet ports provide high-speed network connectivity for efficient data transfer.



# DUAL 2.5G HIGH SPEED ETHERNET

Intel i226V DUAL LAN RJ45 NETWORK  
COMPATIBLE WITH LINUX UBUNTU ESXI VMWARE



# 2500 MB/S



Image: Illustration highlighting the dual 2.5Gbps high-speed Ethernet ports for fast network connectivity.

### 3. Media Streaming Server Hub

Utilize the G9 Mini PC as a media streaming server. With sufficient storage and appropriate software, you can stream movies, music, and other media content to various devices within your home network, including phones, tablets, laptops,

and smart TVs.

# MEDIA STREAMING SERVER HUB

Using our G9 NAS allows for seamless streaming of all your movies and music on any of your devices, including phones, tablets, laptops, and TVs. Stream HD movies or play your favorite tunes in or outside your home.



Image: A visual depicting the Mini PC connected to a monitor, keyboard, and mouse, functioning as a media streaming server hub.

## 4. Budget Homelab Applications

The G9 Mini PC is suitable for homelab setups, allowing you to host servers, run virtual machines, or manage surveillance



systems. Its compact size and multiple storage options make it an ideal solution for personal or small-scale network environments.

# BUDGET HOMELAB

Our G9 NAS is the perfect solution for storing data and making it available to other computers on your network.



Image: The Mini PC integrated into a homelab setup, displaying multiple monitors showing surveillance feeds.

## 5. Triple Display Output

The Mini PC supports connecting up to three 4K displays simultaneously via its two HDMI 2.0 ports and one full-function Type-C port. This capability enhances productivity for office tasks, film viewing, and design work.

# TRIPLE DISPLAY

2\*HDMI 4K+Type C 4K  
Easily Office, Film and Television, Design

The image shows a Mini PC setup on a dark surface. Three curved monitors are arranged in a row, each displaying a different content: the left monitor shows a financial chart with '4K' in the top left; the middle monitor shows a game scene with '4K' in the top left; the right monitor shows a 'Manufacturing Command Room' dashboard with '4K' in the top left. A keyboard and mouse are in front of the monitors. A wireless adapter is shown in the foreground with 'WIFI 6' and 'BT 5.2' icons.

Image: A setup showing the Mini PC connected to three monitors, demonstrating its triple display output capability for multitasking.

### 1. Storage and RAM Upgrades

The G9 Mini PC features a disassembled design for easy upgrades. It supports four M.2 2280 PCIe slots, with a maximum capacity of 4TB per slot, totaling up to 16TB. The system also includes 12GB LPDDR5 RAM and 64GB eMMC storage. To upgrade, carefully open the chassis and install compatible SSDs or RAM modules. Refer to the detailed instructions provided in the separate hardware upgrade guide (if applicable) or consult professional assistance.



# EASY INSTALLATION

Disassembled design, upgrade RAM and SSD easy and convenient



**SSD M.2 2280**

Four SLOT SSD M2 2280\*4  
MAX CAPACITY: 16TB

**MAX 4TB EACH SLOT**



**12GB**

LPDDR5  
4800MHz

**eMMC 64GB**



Image: An exploded view of the Mini PC showing the internal layout and the four M.2 SSD slots for easy installation and upgrades.

## 2. Cooling System

The G9 Mini PC is equipped with a triple cooling system, including two fans for the SSD/DDR compartments and a large fan for the CPU. This design helps maintain optimal operating temperatures while producing minimal fan noise (33-36

dB). Ensure proper ventilation around the device to prevent overheating. Regularly clean dust from the vents using compressed air.

## TROUBLESHOOTING

### Common Issues and Solutions:

- **No Display Output:**
  - Check all display cable connections (HDMI, Type-C).
  - Ensure the monitor is powered on and set to the correct input source.
  - Try a different display cable or monitor.
- **System Not Powering On:**
  - Verify the power adapter is securely connected to both the Mini PC and the power outlet.
  - Test the power outlet with another device.
  - If the device was recently updated or experienced a power issue, a BIOS reset might be necessary (e.g., by temporarily removing the CMOS battery, consult professional guidance if unsure).
- **High Operating Temperatures:**
  - Ensure the Mini PC is placed in a well-ventilated area, away from direct sunlight or heat sources.
  - Do not block the ventilation holes.
  - Consider adding heatsinks to M.2 SSDs, especially if running intensive applications.
  - Update BIOS/UEFI firmware if available, as it may contain thermal management improvements.
- **Operating System Issues (e.g., Linux/Windows not booting):**
  - Access the BIOS/UEFI settings (usually by pressing F7 or F11 during startup) to check boot order.
  - Ensure the correct boot drive (SSD or eMMC) is selected.
  - If an OS is corrupted, a reinstallation may be required.
- **Network Connectivity Problems:**
  - For wired connections, check Ethernet cable integrity and router status.
  - For Wi-Fi, ensure the Wi-Fi adapter is enabled and connected to the correct network.
  - Update network drivers.

For persistent issues, refer to the official GMKtec support resources or contact customer service.

## SPECIFICATIONS

Feature	Specification
Brand	GMKtec
Model Number	GMKtec NUCBOX G9
Processor	Intel N150 (4 Cores, 4 Threads, up to 3.6 GHz)
Graphics	Intel UHD Graphics (max. 1000 MHz)
RAM	12GB LPDDR5



Feature	Specification
Storage (Primary)	1TB M.2 SSD
Storage (Secondary)	64GB eMMC
Storage Expansion	4 x M.2 2280 PCIe slots (Max 16TB total)
Operating System	Dual Boot: Windows 11 Pro, Linux
Video Output	2 x HDMI (4K @ 60 Hz), 1 x Type-C (DP/Data/PD) - Triple Display Support
USB Ports	3 x USB 3.2 (10 Gbps)
Network	Dual RJ45 2.5GbE Ethernet, WiFi 6, Bluetooth 5.2
Audio	3.5mm Audio Jack
Dimensions (L x W x H)	12 x 10 x 12 cm
Weight	1.13 kg

## WARRANTY AND SUPPORT

GMKtec provides comprehensive support for its products. The G9 Mini PC typically comes with a 2-year warranty.

### Amazon Support:

For general inquiries or issues related to your purchase, you can contact Amazon Support. Log in to your Amazon account, go to "Your Orders," and select "Ask Product Question" for assistance.

### After-Sales Support:

For technical assistance, troubleshooting, or warranty claims, you can reach out to the GMKtec After-Sales Team directly.

**Email:** [support@gmktec.com](mailto:support@gmktec.com)

24/7 Customer Support is available via email.



Image: Information regarding warranty and support channels, including Amazon and direct email support.