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> [keepLiNK 48-Port Gigabit Managed Network Switch User Manual \(Model: 48 Ports Gigabit Switch Managed\)](#)

## keepLiNK 48 Ports Gigabit Switch Managed

# keepLiNK 48-Port Gigabit Managed Network Switch User Manual

Model: 48 Ports Gigabit Switch Managed (KP-9000-54XGM-X6-ACR)

## 1. PRODUCT OVERVIEW

The keepLiNK 48-Port Gigabit Managed Network Switch (Model: 48 Ports Gigabit Switch Managed, KP-9000-54XGM-X6-ACR) is a high-performance networking device designed for robust data transmission in various environments. It features 48 Gigabit RJ45 ports, 6 x 10G SFP slots, 1 x 1G Combo port, and 1 x USB Port, offering a switching capacity of 216G. This switch supports L2/L2+/L3 management, advanced security features, and efficient heat dissipation for reliable operation.

### Key Features:

- **High Performance:** Equipped with 48 x Gigabit RJ45 ports, 6 x 10G SFP slots, 1 x 1G Combo, and 1 x USB Port, providing a 216G switching capacity for stable data transmission.
- **L2/L2+/L3 Managed:** Supports Quality of Service (QoS), IGMP Snooping, Link Aggregation, and Flow Control for traffic prioritization and high-quality data transmission.
- **Enhanced Network Security:** Includes 802.1Q VLAN, IP-MAC-Port binding, Access Control Lists (ACL), Port Security, Denial of Service (DoS) defense, Storm control, DHCP Snooping, and 802.1X radius authentication.
- **Efficient Cooling:** Features a metal shell with scientific heat dissipation holes and fan cooling, ensuring reliable operation in temperatures from -10°C to 50°C.
- **Web Management & Cloud Support:** Utilizes WEB management for configuration and supports cloud management via MQTT protocol if a cloud platform is already in place.

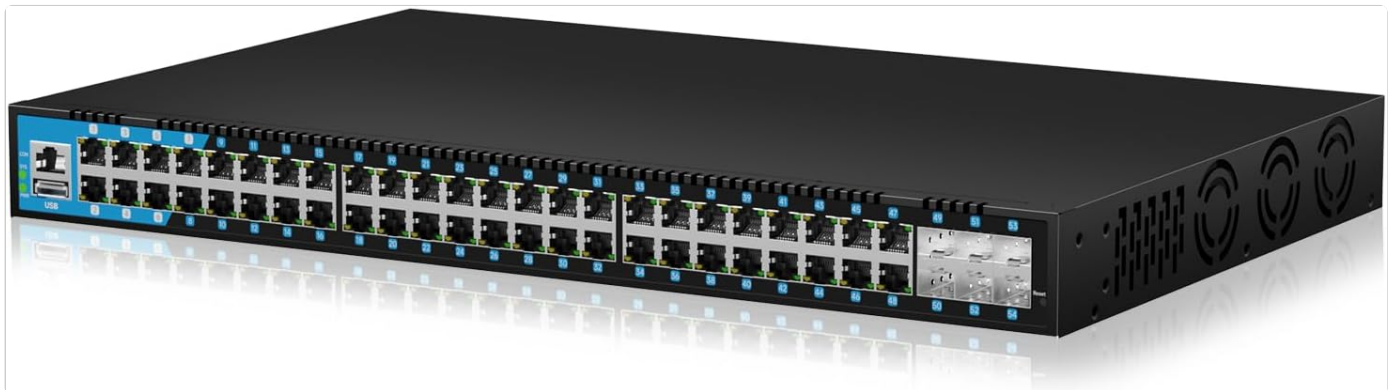


Figure 1: keepLiNK 48-Port Gigabit Managed Network Switch (Front View)

# keepLiNK 48 Ports Gigabit Switch Managed



- ✓ 48 x Gigabit Ports
- ✓ 6 x 10G SFP Slots
- ✓ 1 x Console Port
- ✓ 1 x USB Port
- ✓ Fan forced cooling + Metal casing + More exhaust hole

Figure 2: Detailed front view of the switch, highlighting the 48 Gigabit RJ45 ports and 6 x 10G SFP slots.

# 48-port Gigabit Ethernet L3 Switch with 6-port 10G SFP+

Provides a powerful Layer 3 network solution for next generation enterprise and data center networks

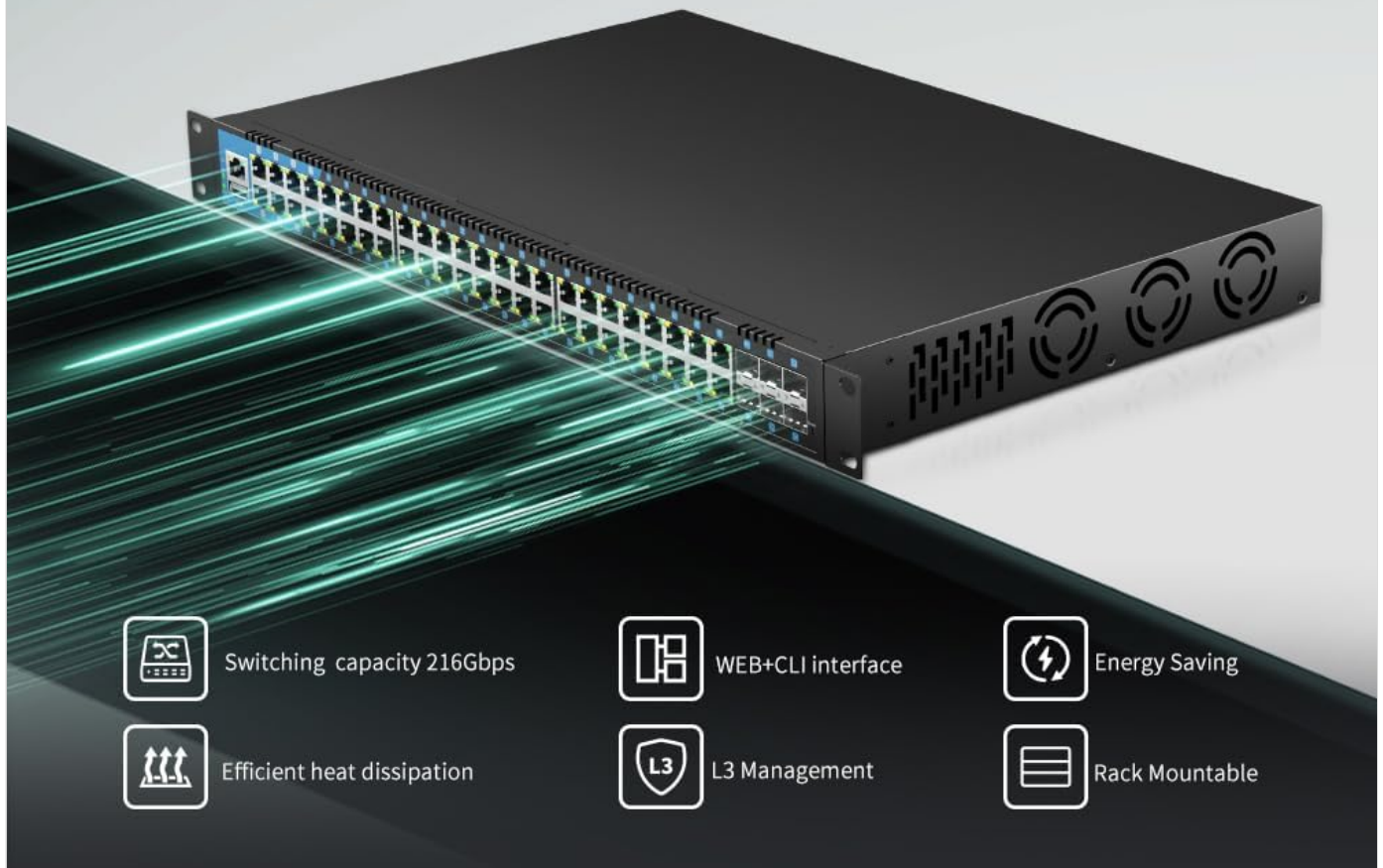


Figure 3: Rear view of the switch, showing the power input and cooling vents for efficient heat dissipation.

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Video 1: An overview of the keepLiNK 48-Port Gigabit PoE Managed Switch, showcasing its features and design.

## 2. SETUP INSTRUCTIONS

### 2.1 Package Contents

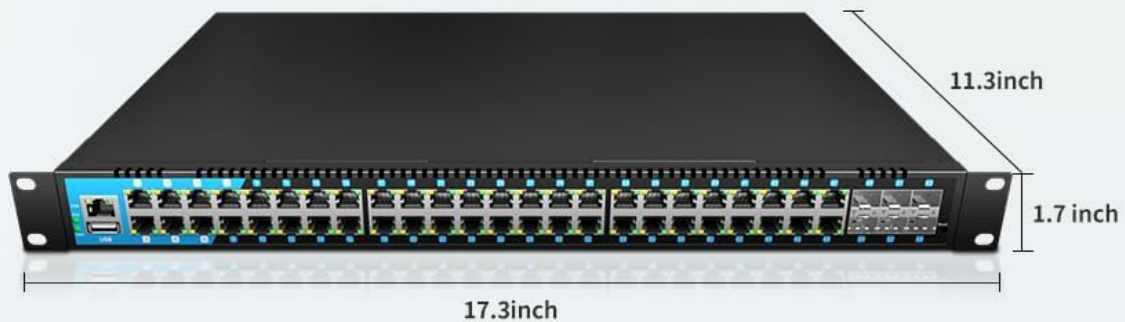
Before proceeding with the installation, please verify that all items are present in the package:

- 1x keepLiNK 48-Port Gigabit Managed Network Switch
- 1x Power Cable
- 1x User's Manual (this document)

### 2.2 Physical Installation

The keepLiNK 48-Port Gigabit Managed Network Switch can be deployed as a desktop unit or rack-mounted. Ensure adequate ventilation around the device.

## 2 x Hanger Included



Rackmount



Desktop

Figure 4: Dimensions and mounting options for the switch. The package includes 2 hangers for rackmount installation.

1. **Power Connection:** Connect the provided power cable to the AC IN port on the rear of the switch and plug it into a suitable power outlet.
2. **Network Connections:**
  - Connect your network devices (computers, servers, IP cameras, etc.) to the RJ45 Gigabit ports (1-48) using standard Ethernet cables.
  - For high-speed uplinks or fiber connections, insert compatible 10G SFP+ modules into the SFP slots (SFP1-SFP6) and connect fiber optic cables.
  - The 1G Combo port can be used for additional Gigabit Ethernet connectivity.
3. **Console Port:** Use the Console port for command-line interface (CLI) management, if preferred.
4. **USB Port:** The USB port can be used for firmware upgrades or configuration backup/restore.

## 2.3 Initial Configuration (Web Management)

The switch supports WEB management for easy configuration. Refer to the device's label or included documentation for the default IP address and login credentials.

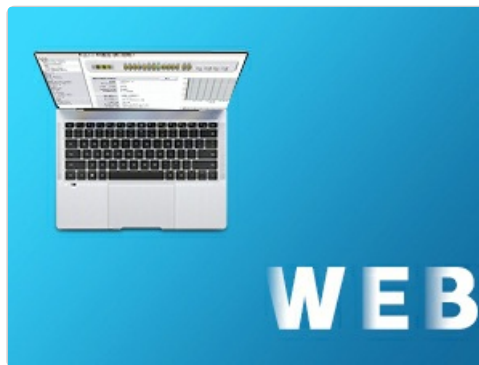


Figure 5: Accessing the switch's web management interface via a connected computer.

1. Connect a computer to any of the switch's RJ45 ports.
2. Configure your computer's IP address to be in the same subnet as the switch's default IP address.
3. Open a web browser and enter the switch's default IP address.
4. Log in using the default username and password.
5. Once logged in, you can configure various network settings, including VLANs, QoS, and security features.

## 3. OPERATING INSTRUCTIONS

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### 3.1 Network Management Features

The keepLiNK switch offers advanced L2/L2+/L3 management capabilities:

- **Quality of Service (QoS):** Prioritize network traffic to ensure critical applications (e.g., video conferencing, VoIP) receive sufficient bandwidth.
- **IGMP Snooping:** Optimizes multicast traffic delivery, preventing unnecessary flooding of multicast packets to all ports.
- **Link Aggregation (LACP):** Combines multiple physical links into a single logical link for increased bandwidth and redundancy.
- **Flow Control:** Manages data flow between devices to prevent packet loss during network congestion.
- **Static Routing:** Allows for manual configuration of routing paths for specific network segments.



Figure 6: QoS for optimizing network performance.

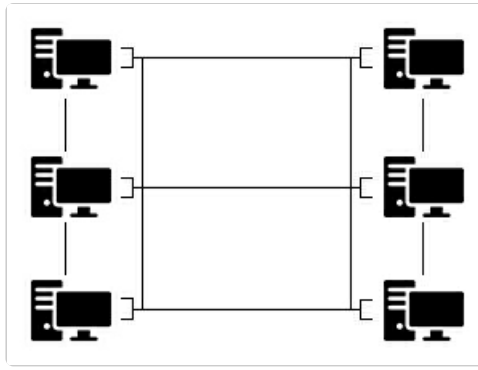


Figure 7: Link Aggregation for enhanced network capacity.

## 3.2 Network Security

Implement robust security measures using the switch's built-in features:

- **802.1Q VLAN:** Segment your network into virtual local area networks to enhance security and manage broadcast domains.
- **IP-MAC-Port Binding:** Binds specific IP and MAC addresses to individual ports, preventing unauthorized access.
- **Access Control Lists (ACL):** Define rules to filter network traffic based on various criteria.
- **Port Security:** Limits the number of MAC addresses allowed on a port to prevent MAC flooding attacks.
- **DoS Defend:** Protects the network from Denial of Service attacks.
- **Storm Control:** Prevents network performance degradation caused by broadcast, multicast, or unknown unicast storms.
- **DHCP Snooping:** Filters untrusted DHCP messages and builds a DHCP snooping binding table.
- **802.1X Radius Authentication:** Provides port-based network access control.



Figure 8: Overview of network security features.

## 3.3 Cloud Management

While the switch primarily uses WEB management, it supports cloud management through the MQTT protocol if you have an existing cloud platform. Consult your cloud platform's documentation for integration details.

## 3.4 PoE Operation (for PoE-enabled models)

This switch supports Power over Ethernet (PoE) on its RJ45 ports, allowing compatible devices to receive power and data over a single Ethernet cable. Ensure your connected devices are PoE-compatible.

Your browser does not support the video tag.

Video 2: Demonstrates correct and incorrect PoE connections for active and passive PoE cameras, including the use of a PoE splitter for passive devices. This video is relevant for understanding PoE functionality and troubleshooting common connection issues.

## 4. MAINTENANCE

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To ensure optimal performance and longevity of your keepLiNK network switch, follow these maintenance guidelines:

- **Ventilation:** Ensure that the cooling vents are clear of obstructions to allow for proper airflow. The switch is designed with scientific heat dissipation holes and fan cooling.
- **Operating Environment:** Operate the switch within the specified temperature range of -10°C to 50°C (14°F to 122°F). Avoid extreme temperatures and humidity.
- **Cleaning:** Regularly clean the exterior of the switch with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- **Firmware Updates:** Periodically check the manufacturer's website for firmware updates to ensure the latest features and security patches.

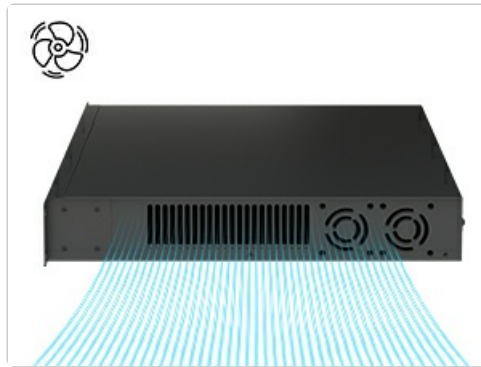


Figure 9: Cooling vents and fans for efficient heat dissipation.

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## 5. TROUBLESHOOTING

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If you encounter issues with your keepLiNK switch, consider the following troubleshooting steps:

- **No Power:**
  - Ensure the power cable is securely connected to both the switch and the power outlet.
  - Verify the power outlet is functional.
- **No Link/Connectivity:**
  - Check the Ethernet cables for proper connection and damage.
  - Verify that the connected device is powered on and functioning correctly.
  - For SFP+ ports, ensure the SFP+ module is correctly inserted and compatible.
- **PoE Device Not Powering On:**
  - Confirm that the connected device is a standard PoE (802.3af/at) compliant device.
  - If connecting a passive PoE camera, ensure a PoE splitter is used between the switch and the camera. Direct connection of passive PoE devices to an active PoE switch will not work. Refer to Video 2 for correct operation.
  - Check the PoE status LED for the specific port.
- **Web Interface Access Issues:**
  - Verify your computer's IP address is in the same subnet as the switch.
  - Ensure you are using the correct IP address, username, and password.
  - Try clearing your browser's cache or using a different browser.

- **Performance Issues:**

- Check for network loops (Spanning Tree Protocol should prevent this, but verify).
- Monitor port utilization and overall network traffic via the web interface.
- Ensure cables are of appropriate length and quality for the desired speed (e.g., Cat5e/Cat6 for Gigabit).

## 6. SPECIFICATIONS

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Feature	Detail
<b>Model Number</b>	48 Ports Gigabit Switch Managed (KP-9000-54XGM-X6-ACR)
<b>Number of Ports</b>	54 (48x Gigabit RJ45, 6x 10G SFP+, 1x 1G Combo, 1x USB)
<b>Data Transfer Rate</b>	216 Gigabits Per Second
<b>Interface Type</b>	RJ45, SFP+
<b>Management</b>	L2/L2+/L3 Managed (WEB, CLI)
<b>Security Features</b>	802.1Q VLAN, IP-MAC-Port binding, ACL, Port Security, DoS defend, Storm control, DHCP Snooping, 802.1X radius authentication
<b>Case Material</b>	Metal
<b>Cooling</b>	Fan cooling with scientific heat dissipation holes
<b>Operating Temperature</b>	-10°C to 50°C (14°F to 122°F)
<b>Product Dimensions</b>	11.3"L x 17.3"W x 1.7"H
<b>Item Weight</b>	4.3 Kilograms (9.45 pounds)
<b>Included Components</b>	Gigabit Switch Managed, Power Cable, User's manual
<b>Compatible Devices</b>	Desktop, Gaming Console, Laptop, Printer, Router

## 7. SUPPORT

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For any questions or assistance regarding your keepLiNK network switch, please contact our customer service team. We are committed to providing 24/7 support and aim to offer a satisfactory solution within 24 hours.

For more information and resources, visit the official [keepLiNK Network Store on Amazon](#).

*keepLiNK*

Figure 10: keepLiNK brand logo, representing quality and support.



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