MokerLink Mini 4*2.5G,2*10G SFP

MokerLink 4-Port 2.5G Ethernet Switch with 2x10G SFP+ Slot

Model: Mini 4*2.5G,2*10G SFP

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of your MokerLink 4-Port 2.5G Ethernet Switch with 2x10G SFP+ Slot. This unmanaged network switch is designed to expand your network capacity with high-speed 2.5 Gigabit Ethernet and 10 Gigabit SFP+ connectivity, suitable for home and office environments.

2. PRODUCT OVERVIEW

The MokerLink 4-Port 2.5G Ethernet Switch is a compact, fanless device featuring four 2.5 Gigabit Ethernet ports and two 10 Gigabit SFP+ uplink slots. It supports adaptive speeds of 10/100/1000Mbps and 2.5Gbps on its RJ45 ports, and 1G/2.5G/10G modules on its SFP+ ports (modules not included). With a 60Gbps backplane bandwidth, it ensures efficient data forwarding. Its metal casing provides durability and aids in heat dissipation, allowing for quiet operation.

Figure 2.1: MokerLink 4-Port 2.5G Ethernet Switch with key features highlighted.
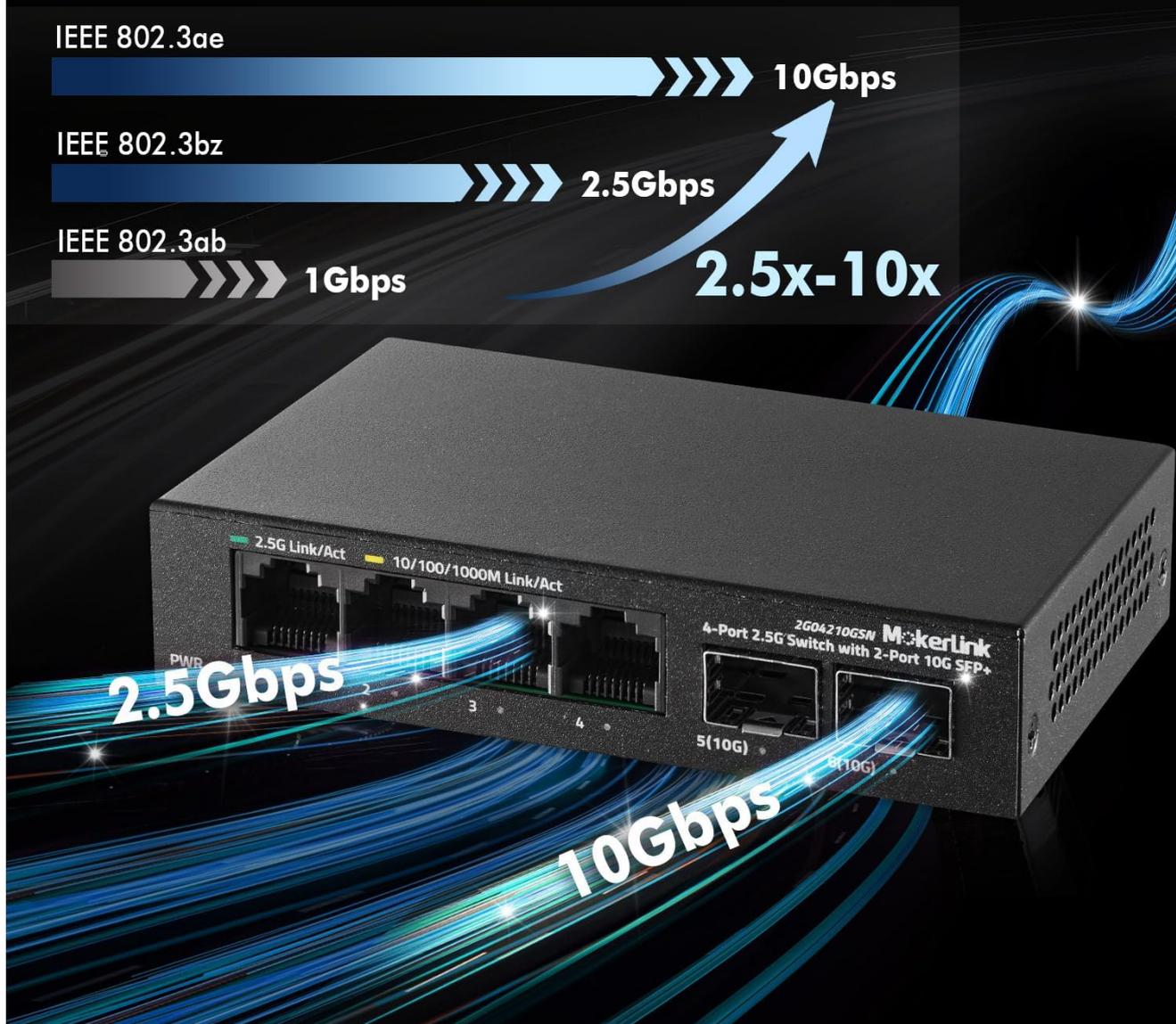
Figure 2.2: Illustration of 2.5G downlink and 10G uplink capabilities, showing speed improvements over 1Gbps.

3. PACKAGE CONTENTS

Verify the following items are included in your package:

- MokerLink 4-Port 2.5G Ethernet Switch (Model: Mini 4*2.5G,2*10G SFP)
- Power Adapter (12V/1A)

Note: SFP modules are not included and must be purchased separately if 10G SFP+ connectivity is desired.

4. SETUP

The MokerLink switch is an unmanaged, plug-and-play device, requiring no complex configuration. Follow these steps for basic setup:

1. **Power Connection:** Connect the provided 12V/1A power adapter to the DC input port on the switch and then plug it into a standard electrical outlet. The PWR LED indicator will illuminate when power is supplied.

2. **Ethernet Device Connection:** Connect your network devices (e.g., computers, NAS, WiFi 6 APs) to the 2.5 Gigabit RJ45 ports (ports 1-4) using standard Ethernet cables (CAT5e, CAT6, or CAT6a recommended for optimal performance). The Link/Act LEDs for each port will indicate connection status and activity.

3. **SFP+ Module Installation (Optional):** If using 10 Gigabit SFP+ connectivity, insert compatible SFP+ modules (1G/2.5G/10G) into the SFP+ slots (ports 5-6). Then, connect appropriate fiber optic cables or DAC cables to the SFP+ modules. The SFP indicator LEDs will show the link status.

4. **Placement:** The switch can be placed on a desktop or mounted on a wall. For wall mounting, use appropriate screws (not included) with the keyhole slots on the bottom of the device. Ensure adequate ventilation around the switch.
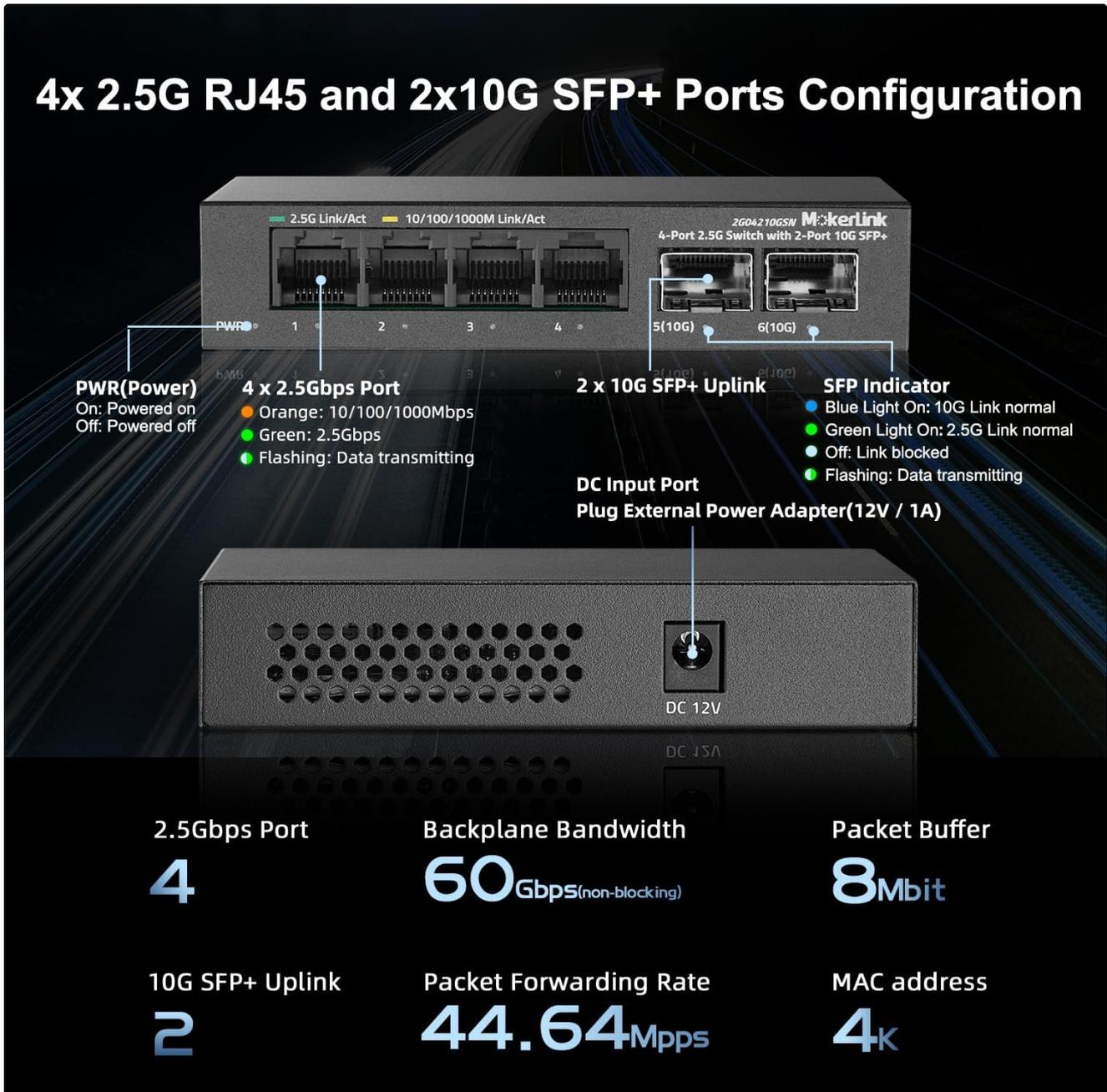

Figure 4.1: Detailed view of the switch's ports, power input, and LED indicators.

Figure 4.2: Example setup showing connections to 2.5G devices and SFP+ modules, with recommended cable types.

Figure 4.3: The switch's compact design and options for desktop or wall-mounted installation.

5. OPERATING

Once connected, the MokerLink switch operates automatically. It is an unmanaged device, meaning it requires no software configuration. Data packets are forwarded between connected devices at the highest possible speed supported by both the device and the switch port.

LED Indicators:

- **PWR (Power):**

  - On: Device is powered on.
  - Off: Device is powered off.

- **2.5G Link/Act (Ports 1-4):**

  - Orange: 10/100/1000Mbps link.
  - Green: 2.5Gbps link.

- Flashing: Data transmitting.

- **SFP Indicator (Ports 5-6):**

  - Blue Light On: 10G Link normal.
  - Green Light On: 2.5G Link normal.
  - Off: Link blocked.
  - Flashing: Data transmitting.

6. MAINTENANCE

The MokerLink switch is designed for reliable, fanless operation, minimizing maintenance requirements.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.
- **Ventilation:** Ensure the switch is placed in a location with adequate airflow to prevent overheating, especially given its fanless design. Avoid blocking the ventilation holes on the sides.
- **Environmental Conditions:** Operate the switch within recommended temperature and humidity ranges (refer to specifications).
- **Cable Management:** Organize network cables to prevent strain on ports and maintain a tidy setup.

7. TROUBLESHOOTING

If you encounter issues with your MokerLink switch, refer to the following common troubleshooting steps:

- **No Power:**

  - Check if the power adapter is securely connected to both the switch and a working electrical outlet.
  - Verify the power outlet is functional by plugging in another device.
  - Ensure the PWR LED is illuminated.

- **No Link/Activity on a Port:**

  - Ensure the Ethernet cable is securely connected to both the switch port and the connected device.
  - Try a different Ethernet cable to rule out a faulty cable.
  - Verify the connected device is powered on and its network adapter is functioning correctly.
  - Check the Link/Act LED for the specific port. If it's off, there's no link.
  - For SFP+ ports, ensure the SFP+ module is correctly inserted and compatible, and the fiber/DAC cable is properly connected.

- **Slow Network Speeds:**

  - Ensure your connected devices support 2.5Gbps or 10Gbps speeds.
  - Use high-quality Ethernet cables (CAT5e, CAT6, or CAT6a) for 2.5G connections and appropriate fiber/DAC cables for 10G SFP+ connections.
  - Check the color of the Link/Act LED for RJ45 ports: Green indicates 2.5Gbps, Orange indicates 10/100/1000Mbps.
  - Confirm that your SFP+ modules are rated for the desired speed (1G, 2.5G, or 10G).
  - Consider the overall network topology and other devices that might be causing bottlenecks.

8. SPECIFICATIONS

Feature	Description
Model	Mini 4*2.5G,2*10G SFP
Ports	4x 2.5G Base-T RJ45, 2x 10G SFP+
RJ45 Port Speed	10/100/1000Mbps/2.5Gbps Adaptive
SFP+ Port Speed	1G/2.5G/10G Compatible (SFP modules not included)
Backplane Bandwidth	60Gbps
Packet Buffer	8Mbit
Packet Forwarding Rate	44.64Mpps
MAC Address Table	4K
Interface Type	SFP, RJ45
Data Transfer Rate	2500 Megabits Per Second (per 2.5G port)
Case Material	Metal
Design	Fanless, Unmanaged, Plug and Play
Item Weight	13.7 ounces (0.39 Kilograms)
Package Dimensions	6.97 x 4.84 x 2.52 inches

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact MokerLink customer service directly. Details regarding product registration, warranty claims, and support resources can typically be found on the manufacturer's official website.
Optional protection plans may be available for purchase from your retailer to extend coverage beyond the standard manufacturer's warranty.