

Real HD SW8-25G-MGV2

Real HD 8 Port 2.5G Managed Ethernet Network Switch with 10G SFP+ Port User Manual

Model: SW8-25G-MGV2

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Real HD 8 Port 2.5G Managed Ethernet Network Switch (Model SW8-25G-MGV2). This device is designed to enhance your network's speed and efficiency with its multi-gigabit capabilities. Please read this manual thoroughly before using the product to ensure proper functionality and safety.

2. PRODUCT OVERVIEW

The Real HD SW8-25G-MGV2 is a managed Ethernet network switch featuring 8x 2.5 Gigabit RJ45 ports and 1x 10G SFP+ port. It supports a 60G bandwidth and is designed for plug-and-play operation. The fanless metal housing ensures quiet operation and efficient heat dissipation.

2.1 Key Features

- **8x 2.5G RJ45 Ports:** Provides high-speed connectivity for 2.5G Ethernet devices.
- **1x 10G SFP+ Port:** Offers ultra-fast uplink or downlink capabilities.
- **60G Bandwidth:** Ensures high data throughput for demanding network environments.
- **Managed Control:** Web-based interface for VLAN, QoS, security, multicast, and MAC address table configurations.
- **Fanless Design:** Silent operation suitable for various environments.
- **Durable Metal Housing:** Compact and sturdy design with 4KV lightning protection.
- **10Gb SFP+ to RJ45 Module Included:** Supports 10GB/5GB/2.5GB/1GB data rates up to 98ft (30m) with CAT6A/CAT7 cable.

2.2 Front and Rear Panel Layout

2.5x Faster Than Regular 1G Network

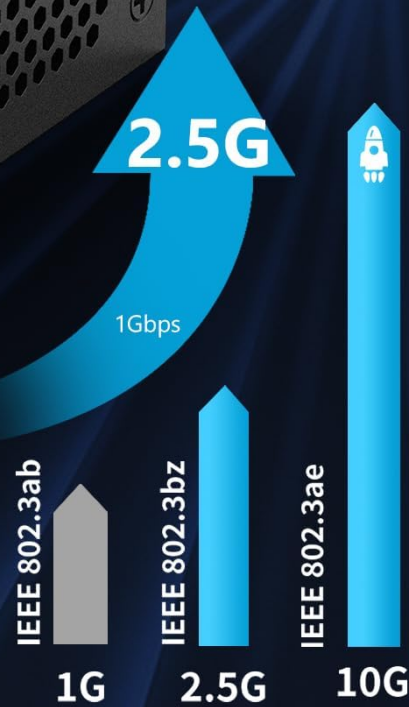
CAT6 Cable ✓

CAT6a Cable ✓

CAT7 Cable ✓



Include a 10Gb SFP+ to RJ45 Module **98Ft (30m)**
For **CAT6a or higher** level pure copper ethernet cable



Backwards compatible with 10M/100M/1000M devices.

NOTE: In order to get 2.5Gb high network speed for 2.5Gb Base-T port please use CAT6 or higher level pure copper ethernet cable ;

Image: Front and rear view of the Real HD 8 Port 2.5G Managed Ethernet Network Switch. The front panel displays 8x 2.5G RJ45 ports and status LEDs. The rear panel shows the 1x 10G SFP+ port and the DC 12V 1A power input.

Basic Management Features to Optimise Your Network Efficiency

VLAN

QoS

Jumbo Frame

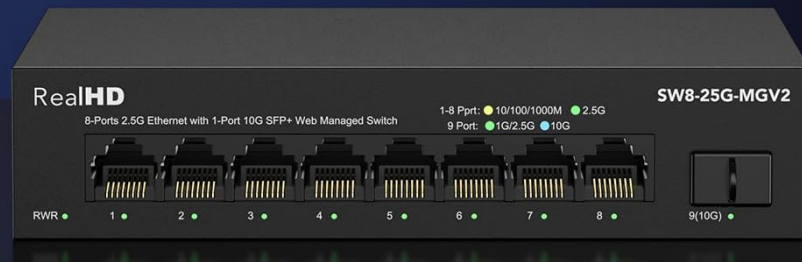
Static aggregation

Lacp

Loop

Spanning Tree Setting

Default IP: 192.168.2.1
User Name: admin
Password: admin



**To activate Static Link Aggregation when using with NAS, Please select "Balance XOR".
Used for connecting the switches configured as Static Link Aggregation (IEEE 802.3ad draft v1).**

Image: Diagram illustrating the 2.5G network speed capability, which is 2.5 times faster than a regular 1G network. It highlights compatibility with CAT6, CAT6a, and CAT7 cables for optimal performance. The image also shows the included 10Gb SFP+ to RJ45 module and its specifications.

Super-Fast 10Gb Wired Performance

Up to 98ft(30 meters) Transmission Distance

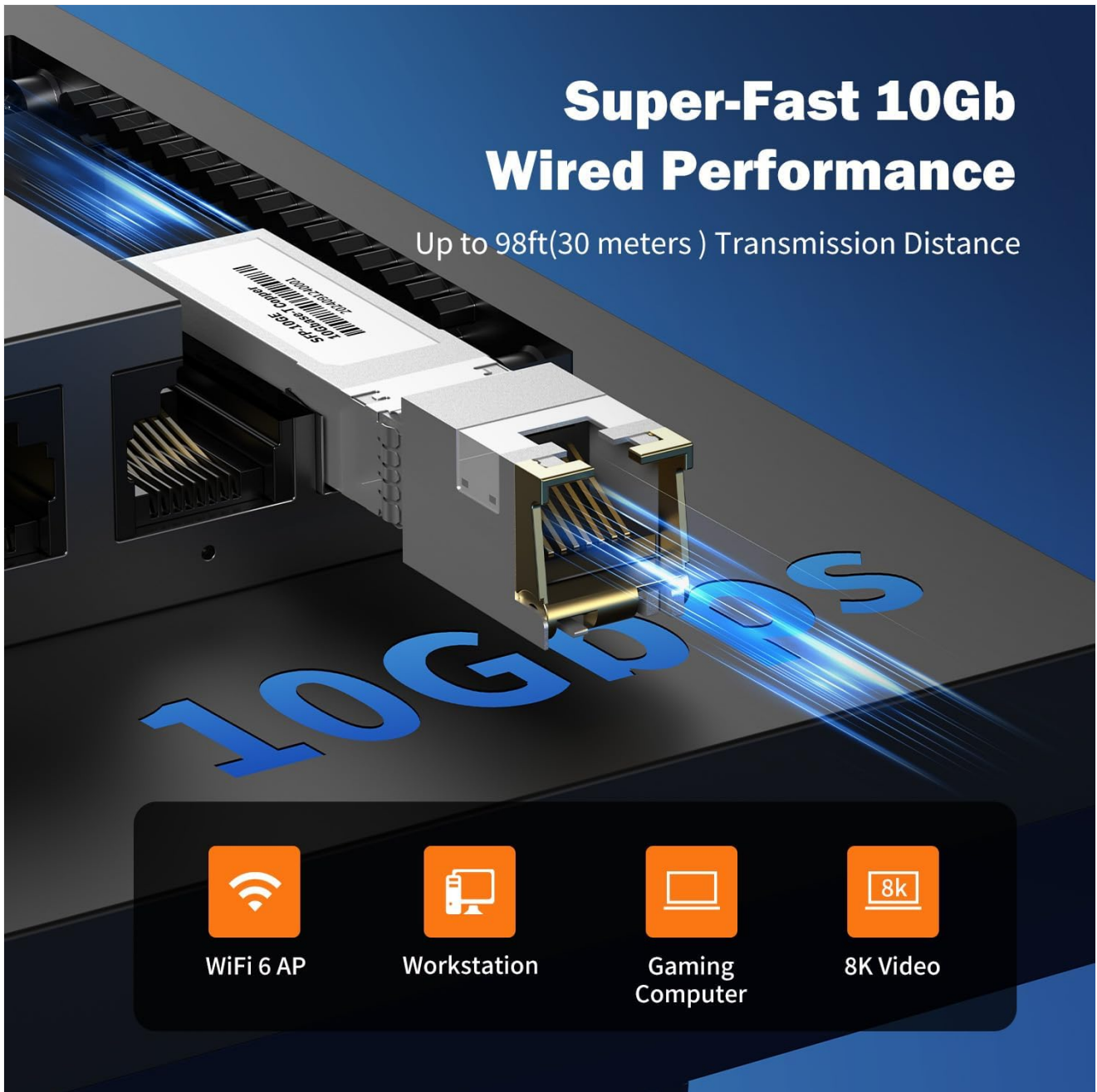


Image: Close-up view of the 10Gb SFP+ module and port, illustrating its capability for super-fast 10Gb wired performance with a transmission distance of up to 98ft (30 meters).

3. SETUP AND INSTALLATION

3.1 Package Contents

Verify that your package contains the following items:

- Real HD 8 Port 2.5G Managed Ethernet Network Switch (SW8-25G-MGV2)
- Power Adapter (DC 12V 1A)
- 10Gb SFP+ to RJ45 Module
- User Manual (this document)

3.2 Connecting the Switch

1. **Power Connection:** Connect the provided power adapter to the DC 12V 1A power input port on the switch and then plug it into a standard electrical outlet.
2. **Network Device Connection:**

- Connect your 2.5G compatible devices (e.g., PCs with 2.5G Ethernet adapters, Wi-Fi 6 routers/APs, NAS) to the 8x 2.5G RJ45 ports using CAT6 or higher-level pure copper Ethernet cables.
- For 10G connectivity, insert the included 10Gb SFP+ to RJ45 module into the SFP+ port. Connect a CAT6A or CAT7 cable from the module to your 10G compatible device.

3. **Verification:** Observe the LED indicators on the front panel. A green light indicates a 2.5G link, while a yellow light indicates a 10/100/1000Mbps link. A flashing light indicates data transmission.

NOTE: To achieve 2.5Gbps or 10Gbps network speeds, ensure all connected network products (network cards, cables, routers) are compatible with these speeds. The network speed will be determined by the slowest component in the chain.

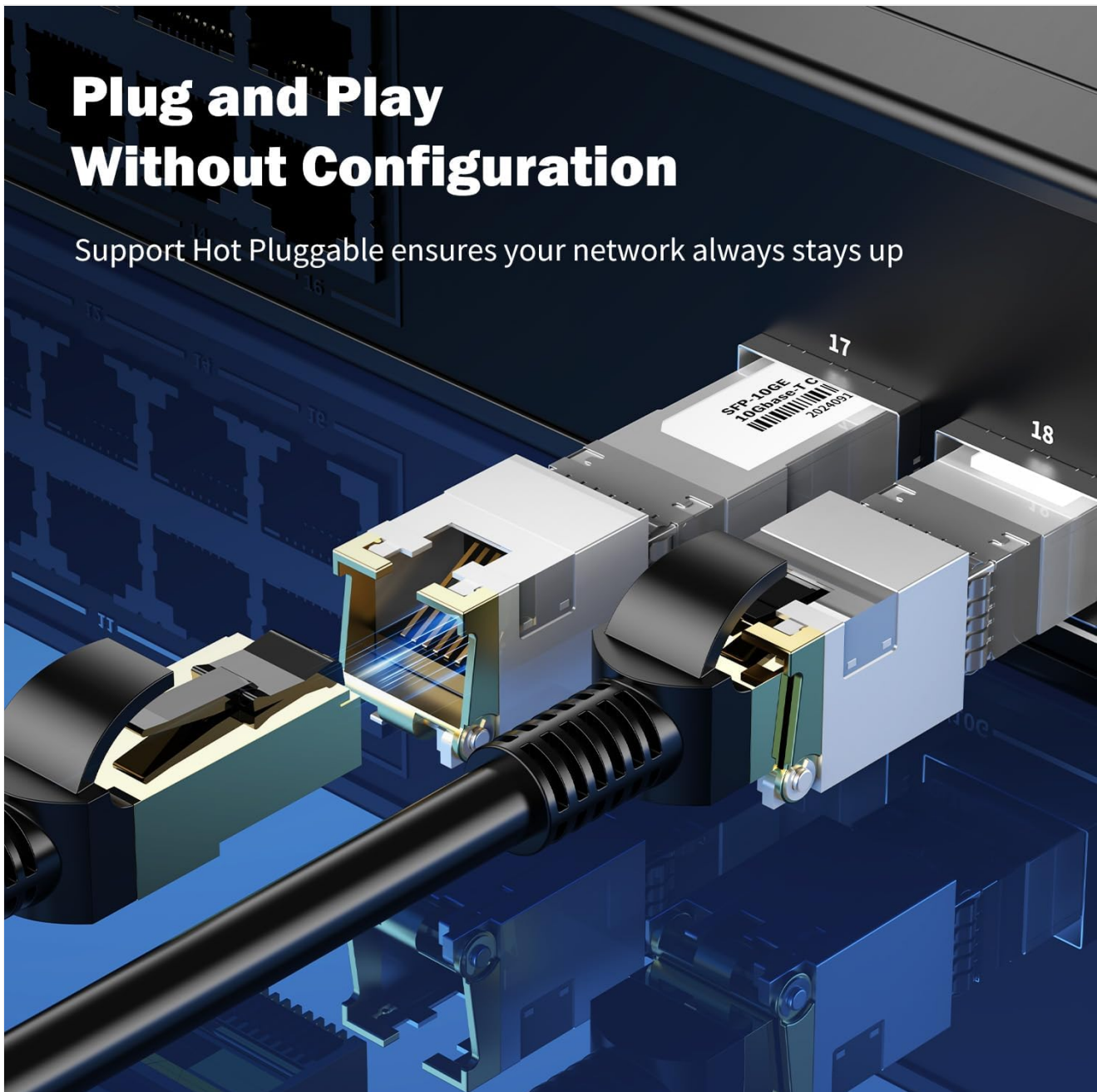


Image: Close-up view of an SFP+ module being inserted into the switch, demonstrating the plug-and-play and hot-pluggable nature of the device, ensuring continuous network operation.

4. OPERATING INSTRUCTIONS

4.1 Basic Operation (Plug & Play)

The Real HD switch is designed for plug-and-play operation. Once powered on and connected to your network devices, it will automatically detect and configure the appropriate speeds for connected devices. No initial configuration is required for basic network extension.

4.2 Web Management Interface

For advanced configurations, the switch features a web-based management interface.

1. Ensure your computer is connected to the switch.
2. Open a web browser and enter the default IP address: **192.168.2.1**
3. Enter the default login credentials:
 - **User Name:** admin
 - **Password:** admin
4. Upon successful login, you can access various settings such as VLAN, QoS, security, multicast, and MAC address table configurations.

NOTE: It is highly recommended to change the default password immediately after the first login for security purposes.

8 Port 2.5Gb Web Managed Ethernet Switch with 1 * 10Gb SFP+ Port



60Gbps

60Gbps Bandwidth

44.64Mbps

44.64Mbps Forwarding rate

8Mbit

8Mbit Package Cache

10K

10K Jumbo Frame

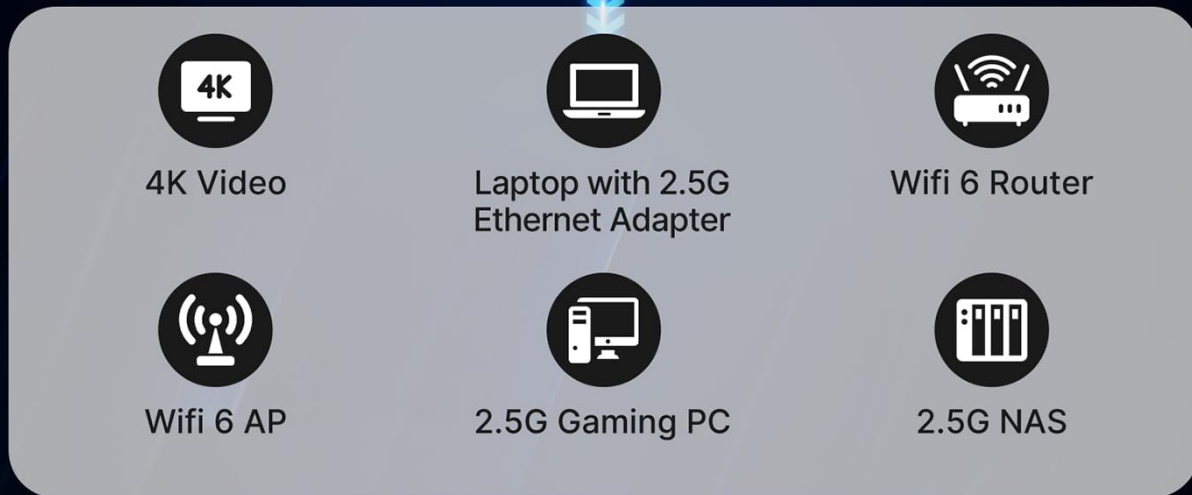
Image: Overview of the switch's basic management features accessible via the web interface. These include VLAN, QoS, Jumbo Frame, Static Aggregation, LACP, Loop, and Spanning Tree Setting. The default IP address (192.168.2.1) and login credentials (User Name: admin, Password: admin) are also displayed.

4.3 Application Scenarios

The switch is suitable for various high-bandwidth applications:

- **4K/8K Video Streaming:** Provides stable bandwidth for high-resolution media.
- **Gaming PCs:** Reduces latency and improves online gaming experience.
- **NAS (Network Attached Storage):** Facilitates fast data transfer for backups and file sharing.
- **Wi-Fi 6 Routers/APs:** Maximizes the performance of high-speed wireless networks.
- **Workstations:** Supports demanding professional applications requiring high network throughput.

Meet the Higher Performance Requirements of 2.5G Devices



NOTE: Please make sure other network products come with 2.5GB network cards to get whole network 2.5GB speed, otherwise the network speed will be determined by the lowest speed network device.

Image: Illustration of various 2.5G compatible devices that can benefit from the switch, such as 4K video devices, laptops with 2.5G Ethernet adapters, Wi-Fi 6 routers and access points, 2.5G gaming PCs, and 2.5G NAS systems.

Multiple Application Scenarios for 2.5G Network



Small and Home Offices



Home Entertainment



Instant Transfer for Workstation



Online Game

Image: Four panels illustrating diverse application scenarios for the 2.5G network switch, including small and home offices, home entertainment setups, instant data transfer for workstations, and enhanced online gaming experiences.

5. MAINTENANCE

- **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 well-ventilated area to prevent overheating. Do not block ventilation openings.
- **Firmware Updates:** Periodically check the manufacturer's website for firmware updates to ensure optimal performance and security.
- **Cable Management:** Keep network cables organized and free from kinks or excessive bends to maintain signal integrity.

6. TROUBLESHOOTING

- **No Power:**
 - Ensure the power adapter is securely connected to the switch and a working power outlet.

- Verify the power outlet is functional by plugging in another device.

- **No Link Light:**

- Check if the Ethernet cable is securely connected to both the switch port and the network device.
- Try a different Ethernet cable.
- Ensure the connected device is powered on and functioning correctly.
- Verify the cable type is appropriate for the desired speed (CAT6 or higher for 2.5G, CAT6A/CAT7 for 10G SFP+ module).

- **Slow Network Speed:**

- Confirm that all devices in the network path (network cards, cables, routers) support 2.5G or 10G speeds. The network will operate at the speed of the slowest component.
- Ensure you are using CAT6 or higher-level pure copper Ethernet cables for 2.5G, and CAT6A/CAT7 for 10G SFP+ connections.
- Check for network congestion or other devices consuming significant bandwidth.

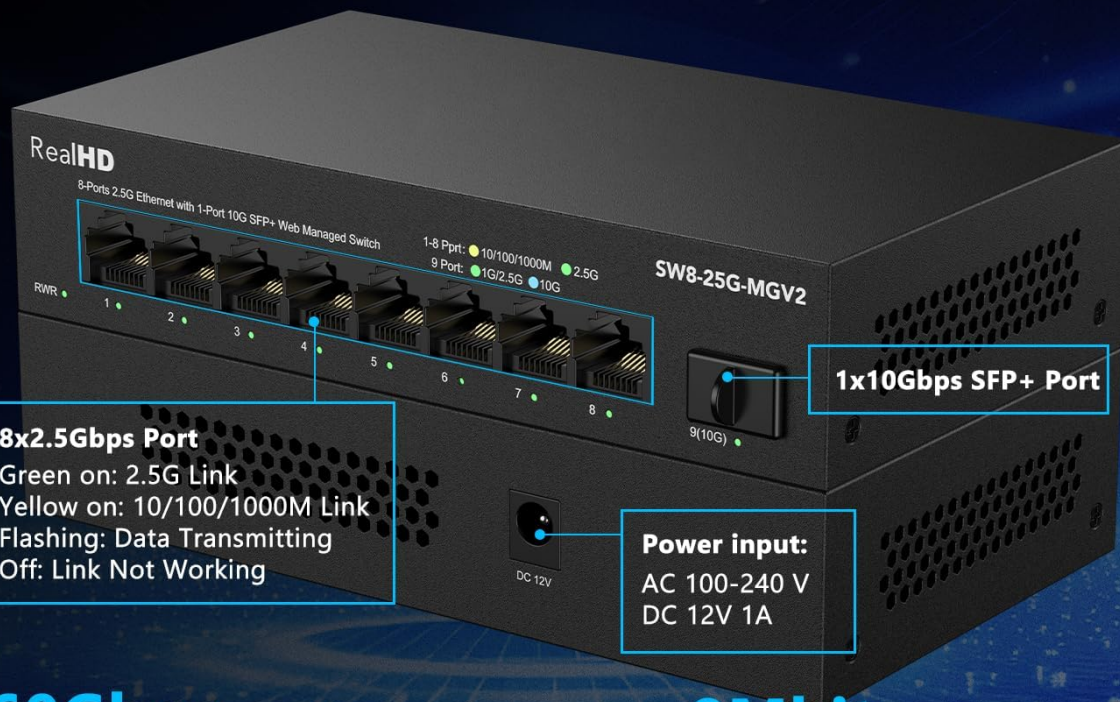
- **Cannot Access Web Management Interface:**

- Ensure your computer is directly connected to the switch or on the same network segment.
- Verify your computer's IP address is in the same subnet as the switch (e.g., if switch is 192.168.2.1, your computer could be 192.168.2.x).
- Confirm you are using the correct default IP address (192.168.2.1) and credentials (admin/admin).
- If the password was changed and forgotten, a factory reset might be necessary (refer to advanced management documentation if available, or contact support).

7. SPECIFICATIONS

Model	SW8-25G-MGV2
Ports	8x 2.5G RJ45 Ports, 1x 10G SFP+ Port
Bandwidth	60 Gbps
Forwarding Rate	44.64 Mpps
Jumbo Frame	10K
Package Cache	8 Mbit
Power Input	AC 100-240 V, DC 12V 1A
Operating Temperature	-20 to 50 °C
Lightning Protection	4KV
Management	Web Managed (VLAN, QoS, Security, Multicast, MAC Address Table)
Included Module	10Gb SFP+ to RJ45 Copper Module (up to 98ft/30m)

8 Port 2.5Gb Web Managed Ethernet Switch with 1 * 10Gb SFP+ Port



8x2.5Gbps Port

Green on: 2.5G Link
Yellow on: 10/100/1000M Link
Flashing: Data Transmitting
Off: Link Not Working

1x10Gbps SFP+ Port

Power input:

AC 100-240 V
DC 12V 1A

60Gbps

60Gbps Bandwidth

44.64Mbps

44.64Mbps Forwarding rate

8Mbit

8Mbit Package Cache

10K

10K Jumbo Frame

Image: A detailed view of the Real HD 8 Port 2.5G Managed Ethernet Switch, highlighting its physical ports, power input specifications, and key performance metrics such as 60Gbps bandwidth, 8Mbit package cache, 44.64Mpps forwarding rate, and 10K Jumbo Frame support.

8. SAFETY INFORMATION

- Do not expose the device to water or excessive humidity.
- Do not attempt to open or repair the device yourself. Refer all servicing to qualified personnel.
- Use only the provided power adapter. Using an incorrect adapter may damage the device and void the warranty.
- Place the device on a stable, flat surface away from direct sunlight, heat sources, and strong electromagnetic fields.
- Ensure proper grounding if required by local electrical codes.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Real HD website or contact your local distributor. Keep your purchase receipt for warranty claims.

Contact Information: Please visit the [Real HD Store on Amazon](#) for further support or product information.