

ienRon 6-Port| 4*2.5G+2*10G SFP

ienRon 6 Port 2.5G Ethernet Switch User Manual

Model: 6-Port| 4*2.5G+2*10G SFP

Brand: ienRon

1. INTRODUCTION

The ienRon 6 Port 2.5G Ethernet Switch is an unmanaged network switch designed to provide high-speed, reliable network connectivity for various applications including gaming, Network Attached Storage (NAS), and 4K/8K streaming. Its plug-and-play design ensures easy setup without complex configurations.

Key Features:

- **Hybrid Multi-Gig Ports:** Equipped with 4x2.5G Base-T ports and 2x10G SFP+ ports, offering a 60Gbps backplane bandwidth for ultra-fast data transfer.
- **Plug & Play Universal Compatibility:** Features auto-negotiation (10/100/1000Mbps to 2.5G/10G) and is compatible with Cat5e/Cat6/Cat7/Cat8 cables, allowing for instant network upgrades.
- **One-Touch VLAN:** Provides 1-4 Port VLAN Isolation with a single switch, enhancing security and optimizing surveillance by blocking network storms and isolating traffic.
- **6KV Lightning Protection:** Built-in 6,000V surge protection and auto-cutoff circuit ensure enterprise-level reliability against lightning strikes, short circuits, and power overloads.
- **Gaming-Optimized:** Offers 0.1ms ultra-low latency with 60Gbps full-duplex mode, ideal for Xbox/PS5 gaming, 8K streaming, and multi-user NAS access.
- **Silent Fanless Design:** Features a full-metal housing for efficient heat dissipation, ensuring noise-free operation, suitable for quiet environments like bedrooms and offices.
- **Flexible Transmission:** RJ45 ports support up to 328 feet (100m) at full speed via Cat5e/Cat6. SFP+ fiber ports can extend connectivity up to 262,467 feet (80km) with 10G modules.



Figure 1: The ienRon 2.5Gbps Lighting Speed Network Switch highlighting its key features.

2. PACKAGE CONTENTS

Please check the package contents upon unboxing to ensure all items are present:

- 1 x ienRon 2.5G Switch
- 1 x Power Adapter
- 1 x Installation Manual (PDF)

3. PRODUCT OVERVIEW

The ienRon 6 Port 2.5G Ethernet Switch features a compact, durable metal housing with clearly labeled ports and indicators for easy identification and operation.

Front Panel Layout:

4 Port 2.5G Unmanaged Ethernet Switch with 2 Port 10G SFP

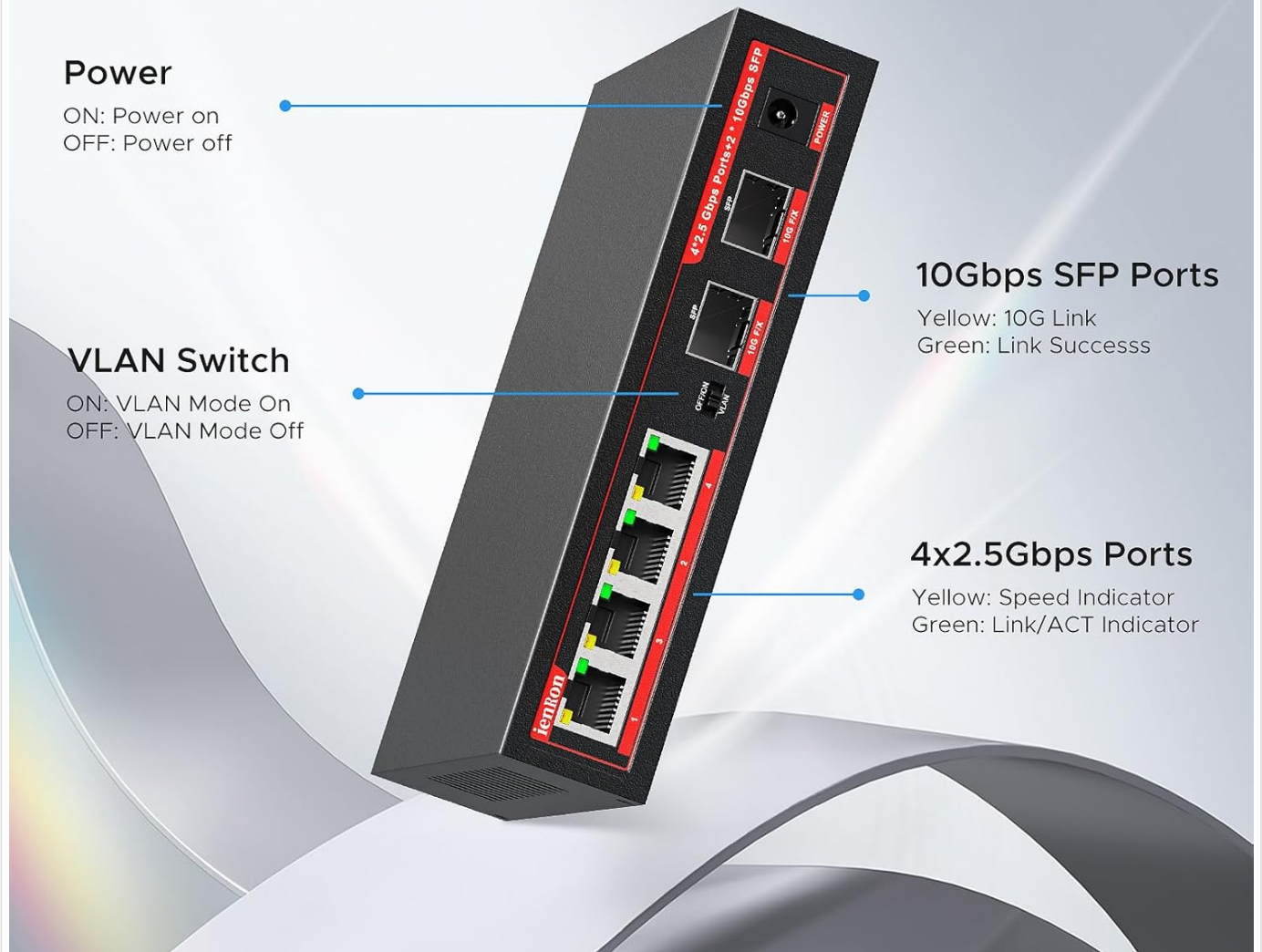


Figure 2: Front panel layout of the ienRon 6 Port 2.5G Ethernet Switch.

- **4x2.5Gbps Ports (RJ45):** These ports support 10/100/1000Mbps and 2.5Gbps speeds with auto-negotiation. Yellow indicator for speed, Green for Link/ACT.
- **2x10Gbps SFP+ Ports:** These ports are designed for 10 Gigabit fiber optic modules (SFP modules are not included). They are compatible with 1.25G and 10G modules, but 2.5G SFP modules are NOT supported.
- **VLAN Switch (OFF/ON):** A toggle switch to enable or disable VLAN isolation.
- **Power Port:** Connects to the included 12V AC power adapter.

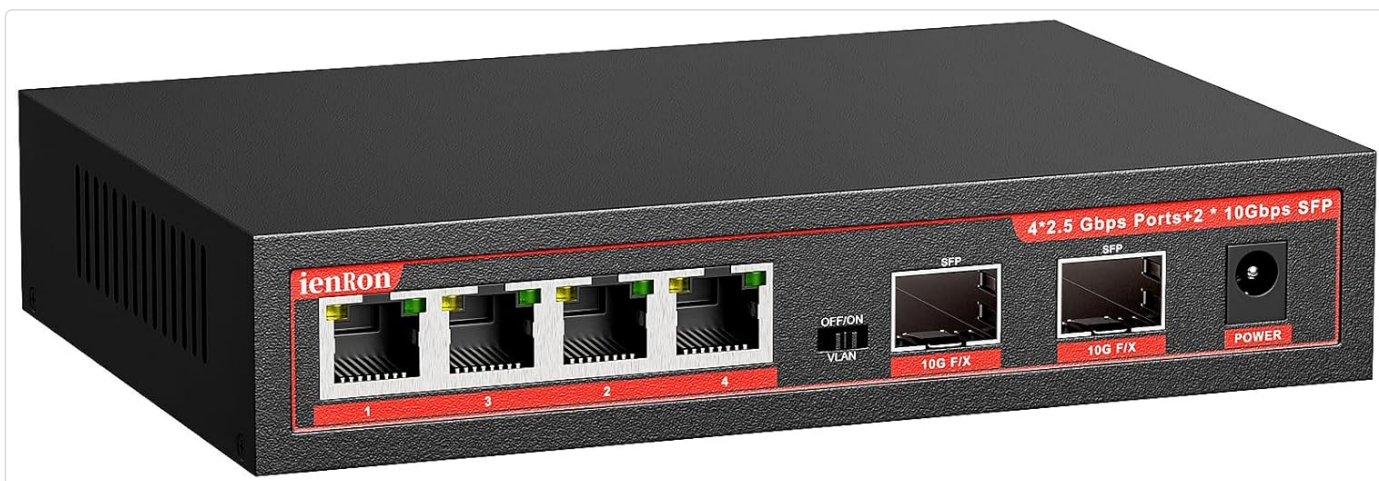


Figure 3: Detailed front view of the ienRon 6 Port 2.5G Ethernet Switch.

4. SETUP

Basic Connection:

1. **Connect Power:** Plug the included power adapter into the switch's power port and then into a power outlet. The power indicator light will illuminate.
2. **Connect Devices:** Use standard Ethernet cables (Cat5e or higher for 2.5G speeds) to connect your network devices (e.g., computers, NAS, WiFi 6 APs, gaming consoles) to the RJ45 ports (1-4) on the switch.
3. **Connect Uplink (Optional):** For higher bandwidth connections to your main network or other switches, use the 10G SFP+ ports with compatible SFP+ modules and fiber optic cables.

The ienRon switch is plug-and-play, requiring no software installation or complex configuration. Simply connect your devices, and the switch will automatically detect and negotiate the optimal speed.

Video 1: Demonstrates the basic setup and connection of the ienRon 2.5Gb Ethernet Switch, showing power connection and connecting an Ethernet cable to a port.

Video 2: Provides a comprehensive overview of the ienRon 6 Port 2.5Gb Switch, highlighting its ease of use, powerful features, and demonstrating the VLAN function and SFP+ port connections.

SFP+ Port Usage:

The two SFP+ ports allow for high-speed fiber optic connections. These ports require compatible SFP+ modules (not included). Ensure the modules you use are 1.25G or 10G compatible. Please note that 2.5G SFP modules are not supported by this switch.

Adaptive 1.25G, 2.5G, 10G Optical Fiber Module

(The Module is NOT included)



Figure 4: Illustration of the SFP+ port's adaptive compatibility with 1.25G and 10G optical fiber modules.

5. OPERATING THE SWITCH

VLAN Functionality:

The ienRon switch includes a convenient VLAN (Virtual Local Area Network) toggle switch. This feature allows you to isolate network traffic between the RJ45 ports (1-4) for enhanced security and network management.

- **VLAN ON:** When the VLAN button is set to 'ON', ports 1 through 4 are isolated from each other. Devices connected to these ports can only communicate with the two 10G SFP+ uplink ports. This is useful for preventing IP camera network storms, isolating AP traffic, or protecting critical data.
- **VLAN OFF:** When the VLAN button is set to 'OFF', all ports (1-4 RJ45 and 2 SFP+) can communicate and share data with each other, functioning as a standard unmanaged switch.

One-Key Isolated for Enhanced Security

Ports 1-4 are isolated from each other, Protect the normal operation of ports



Figure 5: Visual representation of the VLAN isolation feature for enhanced security.

6. MAINTENANCE

The ienRon 6 Port 2.5G Ethernet Switch is designed for minimal maintenance. Its fanless metal housing contributes to its durability and quiet operation.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the switch. Do not use liquid or aerosol cleaners.
- **Placement:** Ensure the switch is placed in a well-ventilated area, away from direct sunlight, heat sources, and excessive moisture. Although fanless, proper airflow helps maintain optimal operating temperature.
- **Firmware:** As an unmanaged switch, no firmware updates are typically required.

Wall Mounted & Compact Size

Features a durable metal housing with a convenient wall mountable design for greater installation flexibility.



Figure 6: The compact and wall-mountable design of the switch, facilitating flexible installation and contributing to its fanless heat dissipation.

7. TROUBLESHOOTING

Here are some common questions and answers to help resolve issues you might encounter:

- **Q: Why is the transmission speed not reaching 2.5G?**

A: Please ensure your network cable is an 8-core Cat6 or above. Lower category cables may not support 2.5G speeds.

- **Q: How do I know if my switch is working?**

A: Use a short network cable and connect any two RJ45 ports or SFP ports. If the indicator light for both connected ports turns on, it means the ports are working correctly.

- **Q: Why is the SFP port not working?**

A: Please verify that the optical fiber modules you are using are compatible with the switch and your optical modem (if applicable). The SFP+ ports only support 1.25G/10G optical fiber modules; 2.5G SFP modules are NOT supported.

• **Q: Why does the switch turn off when an SFP module is connected?**

A: This could indicate an incompatible SFP module. Ensure your SFP module is a 1.25G or 10G optical fiber module.

8. SPECIFICATIONS

Feature	Description
Model Number	6-Port 4*2.5G+2*10G SFP
Number of Ports	6 (4x2.5G RJ45, 2x10G SFP+)
Switch Type	Unmanaged Ethernet Switch
Backplane Bandwidth	60Gbps
Packet Forwarding Rate	44.64Mpps
MAC Address Table Size	16K
Jumbo Frame Support	4MB
Case Material	Metal
Cooling	Fanless Design
Power Adapter	12V 2A
Voltage Input	AC100-240V
Maximum Power Consumption	18 Watts
Operating Temperature	-10 to 55 Degrees Celsius
RJ45 Transmission Distance	100m (328 feet)
SFP+ Fiber Transmission Distance	Up to 80km (262,467 feet) with 10G modules
Product Dimensions (L x W x H)	7.08" x 3.15" x 3.15" (18cm x 8cm x 8cm)
Item Weight	0.65 Kilograms (1.43 pounds)
Installation Methods	Desktop / Wall-Mount
Compatible Devices	Wifi6 Router, Desktop, Camera, 2.5G NAS, Wifi6 AP

9. TYPICAL USE CASES

The ienRon 6 Port 2.5G Ethernet Switch is versatile and can be integrated into various network environments to enhance connectivity and performance:

- **Home Networks:** Ideal for upgrading home networks to support high-bandwidth activities like 4K/8K streaming, online gaming, and connecting multiple smart home devices.
- **Small Office/Home Office (SOHO):** Provides reliable and fast wired connections for workstations, servers, and network storage devices.
- **Gaming Setups:** Connect gaming PCs and consoles directly to the switch for ultra-low latency and a smooth gaming experience.

- **NAS and Media Servers:** Facilitates rapid file transfers and seamless access to Network Attached Storage (NAS) and media servers.
- **IP Camera Surveillance:** The VLAN feature can be utilized to isolate IP camera traffic, preventing network congestion and enhancing security for surveillance systems.



Figure 7: The switch expanding wired connectivity for various devices in a home or office setting.



Figure 8: Versatile applications of the ienRon switch across various environments.

10. SUPPORT

For technical support or inquiries, please refer to the contact information provided with your product packaging or visit the official ienRon website. Our support team is available to assist you with any questions regarding installation, operation, or troubleshooting.

11. WARRANTY INFORMATION

The ienRon 6 Port 2.5G Ethernet Switch comes with a standard manufacturer's warranty. Please refer to the warranty card included in your product packaging for detailed terms and conditions, including warranty period and coverage. Keep your proof of purchase for warranty claims.

