

Planet Technology IGS-5225-4T2S

Planet IGS-5225-4T2S Industrial L2+ Managed Switch User Manual

Model: IGS-5225-4T2S | Brand: Planet Technology

1. PRODUCT OVERVIEW

The PLANET IGS-5225-4T2S is a robust Modbus TCP fully-managed Gigabit fiber switch designed for industrial networking environments. It features 4 10/100/1000Mbps copper ports and 2 100/1000X SFP ports, along with a redundant power system for enhanced reliability. Its IP30 rugged, compact-sized case allows for installation in challenging environments without space limitations. The switch offers advanced IPv6/IPv4 management interfaces, extensive L2/L4 switching functions, and Layer 3 static routing capabilities. It is built to operate stably in temperature ranges from -40 to 75°C and supports DIN rail or wall mounting.



Figure 1: Planet IGS-5225-4T2S Industrial L2+ Managed Switch. An image showing the Planet IGS-5225-4T2S Industrial L2+ Managed Switch. The device is dark blue, compact, and features four copper Ethernet ports and two SFP fiber ports on its front panel. A green terminal block for power input is visible on the top.

2. KEY FEATURES

- **Ports:** 4 10/100/1000TX + 2 100/1000X SFP (Managed Switch)
- **Switch Fabric:** 12Gbps / non-blocking
- **Throughput:** 8.9Mpps @ 64Bytes
- **Max. Power Consumption:** 6.3W / 21.6BTU (power on w/o any connection), 8.5W/29.2BTU (full loading)
- **Supports:** IEEE 1588v2 Transparency, ERPS Ring, DIDO

- **Redundant Ring Technology:** Incorporates ITU-T G.8032 ERPS (Ethernet Ring Protection Switching) and Spanning Tree Protocol (802.1s MSTP) for rapid self-recovery.
- **Fault Alarm:** Provides event alert function and fault alarm features to diagnose abnormal device behavior and network connection issues.
- **Industrial Design:** IP30 rugged, compact-sized case, operating temperature range from -40 to 75°C, supports DIN rail or wall mounting.

3. SETUP AND INSTALLATION

Follow these steps to properly set up and install your IGS-5225-4T2S switch:

1. **Unpack the Device:** Carefully remove the switch from its packaging and inspect for any physical damage. Ensure all components are present.
2. **Mounting:** The switch supports DIN rail or wall mounting. Choose the appropriate method for your industrial environment. Ensure adequate ventilation around the device.
3. **Power Connection:** Connect the redundant power input to a suitable power source using the provided terminal block. Ensure the power supply matches the switch's voltage requirements. The redundant power system enhances reliability.
4. **Network Connections:**
 - Connect Ethernet cables (RJ45) to the 4 10/100/1000TX copper ports for standard network devices.
 - Insert compatible 100/1000X SFP modules into the 2 SFP slots, then connect fiber optic cables as required for extended distance connections.
5. **Initial Configuration:** Refer to the detailed management guide for initial IP address configuration and access to the IPv6/IPv4 management interfaces.

4. OPERATING INSTRUCTIONS

The IGS-5225-4T2S is a fully-managed switch offering extensive control over your network. Key operational aspects include:

- **Management Interfaces:** Access the switch's configuration and monitoring features via its IPv6/IPv4 management interfaces (e.g., web GUI, CLI, SNMP).
- **L2/L4 Switching:** Utilize the abundant Layer 2 and Layer 4 switching functions for traffic management, VLAN configuration, QoS, and security.
- **Layer 3 Static Routing:** Configure static routes to enable inter-VLAN routing and basic network segmentation without requiring a separate router.
- **Redundant Ring Protection:** The switch supports advanced ITU-T G.8032 ERPS and 802.1s MSTP. Configure these protocols to create resilient network topologies with rapid self-recovery (as fast as 20ms in simple ring networks) to prevent service interruptions.
- **Modbus TCP:** Integrate the switch into industrial automation systems using its Modbus TCP support for seamless communication and control.

5. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your industrial switch:

- **Environmental Control:** Ensure the operating environment remains within the specified temperature range (-40 to 75°C) and humidity levels. The IP30 rating protects against solid objects but not liquids.
- **Cleaning:** Periodically clean the exterior of the switch with a soft, dry cloth. Do not use liquid cleaners or solvents. Ensure ventilation openings are free from dust and debris.
- **Firmware Updates:** Check the manufacturer's website periodically for firmware updates. Applying updates can improve performance, add features, and address security vulnerabilities.
- **Monitoring:** Utilize the switch's event alert function and fault alarm features to proactively monitor its status. These features help diagnose abnormal device behavior or network connection breaks.
- **Cable Management:** Ensure all network and power cables are securely connected and properly routed to prevent accidental disconnections or damage.

6. TROUBLESHOOTING

If you encounter issues with your IGS-5225-4T2S switch, consider the following troubleshooting steps:

- **No Power:**
 - Verify the power cable is securely connected to both the switch and the power source.
 - Check the power supply unit for proper operation.
 - Ensure the power source is active.
- **No Network Connectivity:**
 - Check the Ethernet or fiber optic cables for proper connection and integrity.
 - Verify the link/activity LEDs on the switch ports. If off, check the connected device or cable.
 - Confirm IP address settings and network configuration via the management interface.
 - If using SFP modules, ensure they are compatible and properly seated.
- **Slow Network Performance:**
 - Check for network loops (though ERPS/MSTP should prevent this, misconfiguration can occur).
 - Monitor port utilization and error rates via the management interface.
 - Ensure connected devices are operating at their expected speeds (e.g., Gigabit).
- **Management Interface Inaccessible:**
 - Verify your computer's IP address is in the same subnet as the switch's management IP.
 - Try pinging the switch's IP address.
 - If necessary, perform a factory reset (refer to the full product manual for instructions, as this will erase configurations).
- **Fault Alarm Triggered:**
 - Consult the switch's log or alarm status via the management interface to identify the specific cause of the alarm.
 - Address the underlying issue indicated by the alarm (e.g., power failure, port link down).

For more complex issues, refer to the comprehensive technical documentation or contact Planet Technology support.

7. SPECIFICATIONS

Attribute	Value
Model Number	IGS-5225-4T2S
Ports	4 x 10/100/1000TX, 2 x 100/1000X SFP
Switch Fabric	12Gbps / non-blocking
Throughput	8.9Mpps @ 64Bytes
Max. Power Consumption	6.3W (idle), 8.5W (full loading)
Product Dimensions	5.31 x 3.43 x 1.26 inches
Item Weight	1.01 Pounds
Manufacturer	Planet Technology
Date First Available	March 2, 2017
Operating Temperature	-40 to 75°C
Housing	IP30 rugged metal case

8. WARRANTY INFORMATION

For information regarding the warranty for your Planet IGS-5225-4T2S switch, please refer to the official Planet Technology warranty policy.

To check if your product is eligible for the PlanetechPRO Lifetime Warranty, visit the following link:
<https://planetechusa.com/planetechpro-covered-products/>


9. TECHNICAL SUPPORT






If you require further assistance or encounter issues not covered in this manual, please contact Planet Technology's technical support team. Have your product model number (IGS-5225-4T2S) and serial number ready when contacting support.

For support resources and contact information, please visit the official Planet Technology website.

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Related Documents - IGS-5225-4T2S

	<p>Choosing a Home Automation Standard: A Guide to Zigbee, Z-Wave, Wi-Fi, and Bluetooth</p> <p>Learn what you need to know before choosing a home automation standard. This guide compares Zigbee, Z-Wave, Wi-Fi, and Bluetooth, explaining their features, pros, and cons, with a focus on Z-Wave Plus for seamless smart home integration.</p>
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 <p>Industrial L3 Multi-Port Gigabit Managed Ethernet Switch IGS-6325 DIN-rail Series Quick Installation Guide</p>	<p>PLANET IGS-6325 Series Industrial Managed Ethernet Switch Quick Installation Guide</p> <p>This Quick Installation Guide provides essential information for installing and configuring the PLANET IGS-6325 DIN-rail series industrial managed Ethernet switches. It covers package contents, system requirements, power wiring, terminal and web management setup, IP configuration, and customer support resources.</p>
 <p>Industrial L2+ 8-Port 10/100/1000T M12 Wall-mount Managed Switch WGS-5225-8MT Quick Installation Guide</p>	<p>PLANET WGS-5225-8MT Industrial L2+ 8-Port Managed Switch Quick Installation Guide</p> <p>Quick installation guide for the PLANET WGS-5225-8MT Industrial L2+ 8-Port 10/100/1000T M12 Wall-mount Managed Switch, covering package contents, hardware installation, and initial web login.</p>
	<p>PLANET IGS-801M Industrial Managed Switch Quick Installation Guide</p> <p>Quick installation guide for the PLANET IGS-801M Industrial Layer 2/4 Managed Ethernet Switch, covering package contents, requirements, power wiring, grounding, web login, and reset procedures.</p>
 <p>Industrial L3 Multi-Gigabit/10Gigabit Managed Ethernet Switch IGS-6325-4T2X/IGS-6325-4UP2X/IGS-6325-5X1T Quick Installation Guide</p>	<p>PLANET IGS-6325 Series Industrial Managed Ethernet Switch Quick Installation Guide</p> <p>Quick installation guide for PLANET IGS-6325-4T2X, IGS-6325-4UP2X, and IGS-6325-5X1T industrial managed Ethernet switches, covering package contents, requirements, power wiring, terminal setup, web management, and default configuration restoration.</p>
	<p>SKS1200-4GPY2XF-P Unmanaged PoE Switch User Manual & Technical Specifications</p> <p>Detailed user manual and technical specifications for the SKS1200-4GPY2XF-P unmanaged PoE switch from AnHui Seeker Electronic Technology Co.,Ltd, featuring 4x 2.5Gbps PoE RJ45 ports and 2x 10Gbps SFP+ ports.</p>