

24-Port 10/100/1000T + 4-Port 100/1000X SFP Managed Gigabit Switch



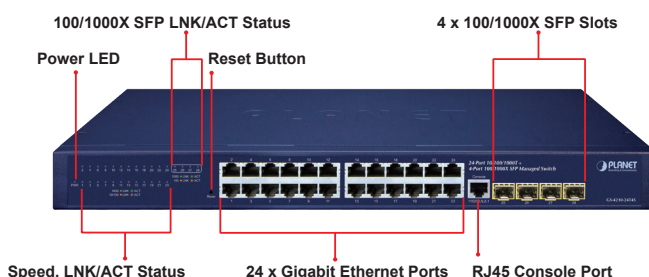
Perfect Managed Switches with Advanced L2/L4 Switching and Security

PLANET GS-4210-24T4S and GS-4210-24T4SR are the ideal Gigabit Switches which provide cost-effective advantage to local area networks and are widely accepted in the SMB office network. They offer **intelligent L2/L4 data packet switching** and management functions, friendly web user interface and stable operation. Besides the popular IPv6/IPv4 management and abundant L2/L4 switching functions, the GS-4210-24T4S and GS-4210-24T4SR come with fanless feature and green technology to provide a quiet, energy-saving, high-speed and reliable office network environment.



The GS-4210-24T4S and GS-4210-24T4SR are equipped with **24 10/100/1000BASE-T** Gigabit Ethernet ports and **4 additional 100/1000BASE-X** SFP interfaces with built-in AC or AC+DC redundant power system. They offer a rack-mountable, affordable, safe and reliable Gigabit network switch solution for SMBs deploying networks, or requiring enhanced data security and network traffic management.

GS-4210-24T4S



Physical Port

- **24-Port 10/100/1000BASE-T** Gigabit RJ45 copper
- **4 100/1000BASE-X** mini-GBIC/SFP slots
- RJ45 console interface for switch basic management and setup
- Reset button for system factory default

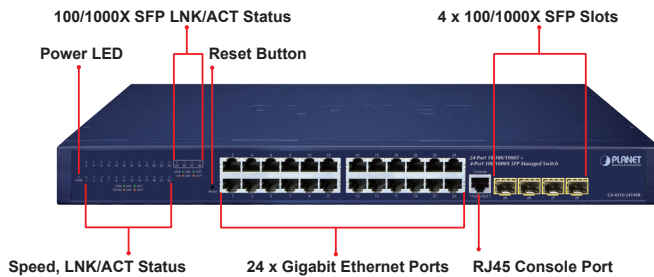
Switching

- Hardware-based 10/100Mbps, half/full duplex and 1000Mbps full duplex mode, flow control and auto-negotiation, and auto MDI/MDI-X
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- 10K jumbo frame
- Automatic address learning and address aging
- Supports CSMA/CD protocol

Layer 2 Features

- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Supports **VLAN**
 - IEEE 802.1Q tagged VLAN
 - Provider Bridging (VLAN Q-in-Q) support (IEEE 802.1ad)
 - Protocol VLAN
 - Voice VLAN
 - Private VLAN
 - Management VLAN
 - GVRP
- Supports **Spanning Tree Protocol**
 - STP (Spanning Tree Protocol)
 - RSTP (Rapid Spanning Tree Protocol)
 - MSTP (Multiple Spanning Tree Protocol)
 - STP BPDU Guard, BPDU Filtering and BPDU Forwarding

GS-4210-24T4SR



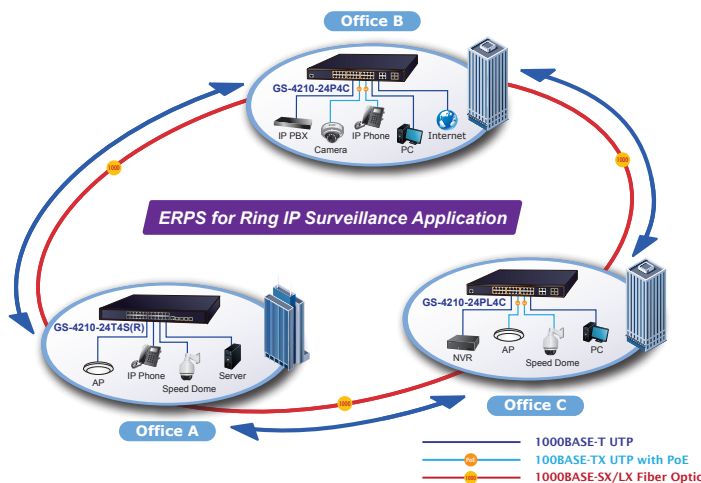
Cybersecurity Network Solution to Minimize Security Risks

The GS-4210-24T4S(R) supports SSHv2 and TLS protocols to provide strong protection against advanced threats. It includes a range of cybersecurity features such as **DHCP Snooping**, **IP Source Guard**, **dynamic ARP Inspection**, **802.1x port-based** network access control, **RADIUS** and **TACACS+** user accounts management, **SNMPv3** authentication, and so on to complement it as an all-security solution.



Redundant Ring, Fast Recovery for Critical Network Applications

The GS-4210-24T4S(R) supports redundant ring technology and features strong, rapid self-recovery capability to prevent interruptions and external intrusions. It incorporates advanced **ITU-T G.8032 ERPS (Ethernet Ring Protection Switching)** technology, Spanning Tree Protocol (802.1s MSTP) into customer's network to enhance system reliability and uptime in various environments.



- Supports **Link Aggregation**
 - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
 - Cisco ether-channel (Static Trunk)
 - Maximum 8 trunk groups, up to 8 ports per trunk group
- Provides port mirror (many-to-1)
- Loop protection to avoid broadcast loops
- Supports ERPS (Ethernet Ring Protection Switching)

Quality of Service

- Ingress/Egress Rate Limit per port bandwidth control
- Storm Control support
 - Broadcast/Unknown-Unicast/Unknown-Multicast
- Traffic classification
 - IEEE 802.1p CoS
 - TOS/DSCP/IP Precedence of IPv4/IPv6 packets
- Strict priority and Weighted Round Robin (WRR) CoS policies

Multicast

- Supports IPv4 IGMP snooping v2 and v3
- Supports IPv6 MLD snooping v1, v2
- IGMP querier mode support
- IGMP snooping port filtering
- MLD snooping port filtering

Security

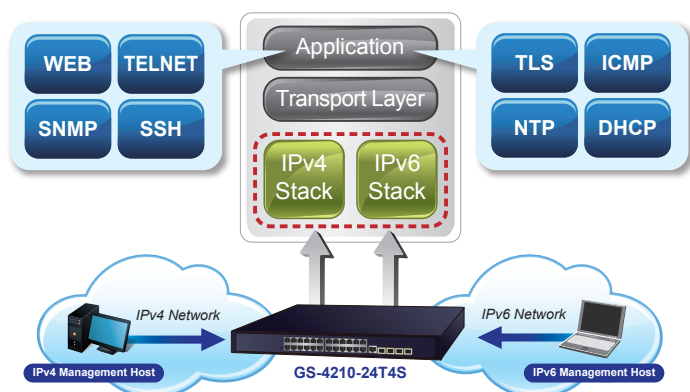
- Authentication
 - IEEE 802.1X Port-based network access authentication
 - Built-in RADIUS client to co-operate with the RADIUS servers
 - DHCP Option 82
 - RADIUS/TACACS+ login user access authentication
- Access Control List
 - IPv4/IPv6 IP-based ACL
 - IPv4/IPv6 IP-based ACE
 - MAC-based ACL
 - MAC-based ACE
- MAC Security
 - Static MAC
 - MAC Filtering
- Port Security for Source MAC address entries filtering
- DHCP Snooping to filter distrusted DHCP messages
- Dynamic ARP Inspection discards ARP packets with invalid MAC address to IP address binding

Redundant AC/DC Power Supply to Ensure Continuous Operation

The GS-4210-24T4SR is particularly equipped with one 100~240V AC power supply unit and one 36~72V DC power supply unit to provide an enhanced reliable and scalable redundant power supply, the continuous power system is specifically designed to fulfill the demands of high-tech facilities requiring the highest power integrity. With the 36~72V DC power supply, the GS-4210-24T4SR is able to act as a telecom-level device that can be located in the electronic room.

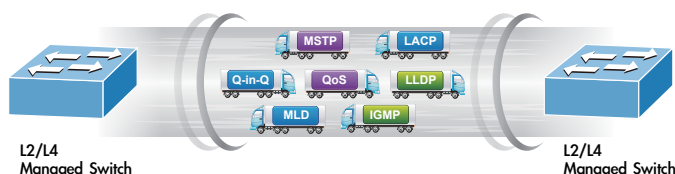
IPv6/IPv4 Dual Stack Management

Supporting both IPv6 and IPv4 protocols, the GS-4210-24T4S and GS-4210-24T4SR help the SMBs to step in the IPv6 era with the lowest investment as their network facilities need not be replaced or overhauled if the IPv6 FTTx edge network is set up.



Robust Layer 2 Features

The GS-4210-24T4S and GS-4210-24T4SR can be programmed for advanced switch management functions such as dynamic port link aggregation, 802.1Q **VLAN** and **Q-in-Q VLAN**, **Multiple Spanning Tree protocol (MSTP)**, loop and **BPDU guard**, **IGMP snooping**, and **MLD snooping**. Via the link aggregation, the GS-4210-24T4S and GS-4210-24T4SR allow the operation of a high-speed trunk to combine with multiple ports, and supports fail-over as well. Also, the **Link Layer Discovery Protocol (LLDP)** is the Layer 2 protocol included to help discover basic information about neighboring devices on the local broadcast domain.



Efficient Traffic Control

The GS-4210-24T4S and GS-4210-24T4SR are loaded with robust QoS features and powerful traffic management to enhance services to business-class data, voice, and video solutions. The functionality includes broadcast / multicast **storm control**, per port **bandwidth control**, IP DSCP QoS priority and remarking. They guarantee the best performance for VoIP and video stream transmission, and empowers the enterprises to take full advantage of the limited network resources.

- IP Source Guard prevents IP spoofing attacks
- DoS Attack Prevention

Management

- IPv4 and IPv6 dual stack management
- Switch Management Interface
 - Web switch management
 - Console/Telnet Command Line Interface
 - SNMP v1 and v2c switch management
 - SSHv2, TLSv1.2 and SNMP v3 secure access
- SNMP Management
 - Four RMON groups (history, statistics, alarms, and events)
 - SNMP trap for interface Link Up and Link Down notification
- User Privilege Levels Control
- Built-in Trivial File Transfer Protocol (TFTP) client
- BOOTP and DHCP for IP address assignment
- System Maintenance
 - Firmware upload/download via HTTP/TFTP
 - Configuration upload/download through Web interface
 - Dual Images
 - Hardware reset button for system reboot or reset to factory default
- SNTP Network Time Protocol
- Network Diagnostic
 - ICMPv6/ICMPv4 Remote Ping
 - Cable Diagnostics
- Link Layer Discovery Protocol (LLDP) Protocol and LLDP-MED
- Event message logging to remote Syslog server
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS system and NMSViewerPro/CloudViewerPro for deployment management

Redundant Power System (GS-4210-24T4SR)

- Redundant 100~240V AC/36~72V DC dual power
- Active-active redundant power failure protection
- Backup of catastrophic power failure on one supply
- Fault tolerance and resilience