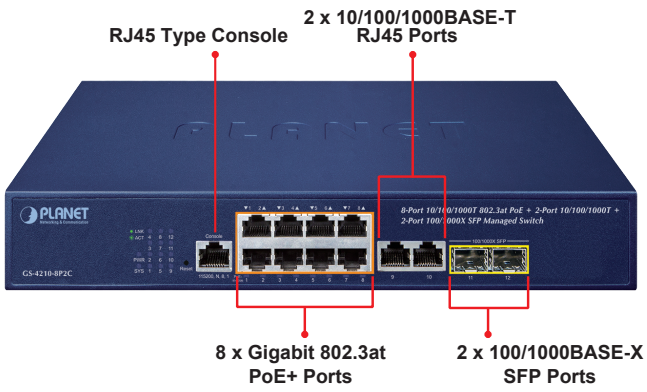
GS-4210-8P2C

8-Port 10/100/1000T 802.3at PoE + 2-Port 10/100/1000T+ 2-Port 100/1000X SFP Managed Switch

A Perfect Managed PoE+ Switch with Advanced L2/L4 Switching and Security

PLANET GS-4210-8P2C is a cost-optimized, desktop-size Managed Gigabit PoE+ Switch featuring PLANET **intelligent PoE** functions to improve the availability of critical business applications. It provides IPv6/IPv4 dual stack management and built-in L2/L4 Gigabit switching engine along with **8 10/100/1000BASE-T** ports featuring **32-watt 802.3at PoE+**, **2 additional Gigabit copper ports** and **2 additional 100/1000BASE-X SFP fiber slots**. With a total power budget of up to **120 watts** for different kinds of PoE applications, it provides a quick, safe and cost-effective Power over Ethernet network solution for small businesses and enterprises.



Physical Port

- **8-Port 10/100/1000BASE-T** Gigabit RJ45 copper with 8-Port IEEE 802.3at/af PoE Injector function (Port-1 to Port-8)
- **2-Port 10/100/1000BASE-T** Gigabit RJ45
- **2 100/1000BASE-X** SFP ports
- RJ45 console interface for switch basic management and setup

Power over Ethernet

- Complies with IEEE 802.3at Power over Ethernet Plus, end-span PSE
- Backward compatible with IEEE 802.3af Power over Ethernet
- Up to 8 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 32 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters in standard mode and 250m in extend mode
- PoE management
  - Per port PoE function enable/disable
  - PoE port power feeding priority
  - Per PoE port power allocation
  - PD classification detection
  - PD alive check
  - PoE schedule

Layer 2 Features

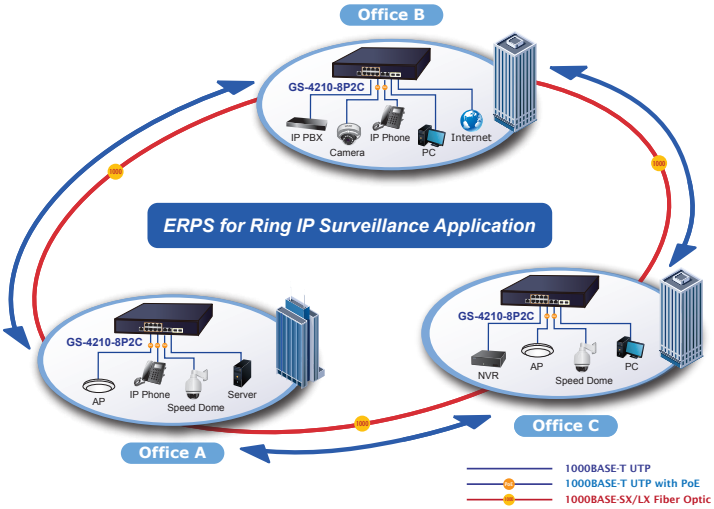
- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High performance Store and Forward architecture, broadcast storm control, runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Supports **VLAN**
  - IEEE 802.1Q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

Cybersecurity Network Solution to Minimize Security Risks

The GS-4210-8P2C 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**, **ARP Inspection** Protection, **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-4210-8P2C 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.



Built-in Unique PoE Functions for Powered Devices Management

As it is the managed PoE switch for surveillance, wireless and VoIP networks, the GS-4210-8P2C features the following special PoE management functions:

- PD Alive Check
- Scheduled Power Recycling
- PoE Schedule
- PoE Usage Monitoring
- PoE Extension

- 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
- Supports **Link Aggregation**
  - IEEE 802.3ad Link Aggregation Control Protocol (LACP)
  - Cisco ether-channel (static trunk)
  - Maximum 2 trunk groups, up to 4 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

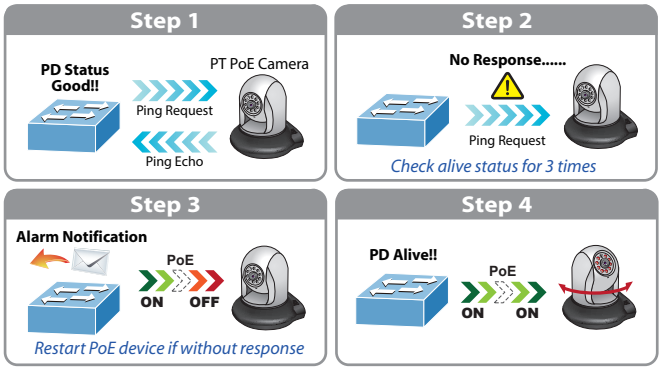
- Supports IPv4 IGMP snooping v2 and v3
- Supports IPv6 MLD snooping v1, v2
- IGMP querier mode support
- IGMP snooping port filtering
- MLD snooping port filtering

Security

- Authentication
  - IEEE 802.1X Port-based network access authentication
  - Built-in RADIUS client to co-operate with the RADIUS servers
  - RADIUS/TACACS+ login user access authentication
- Access Control List
  - IPv4/IPv6 IP-based ACL/ACE
  - MAC-based ACL/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

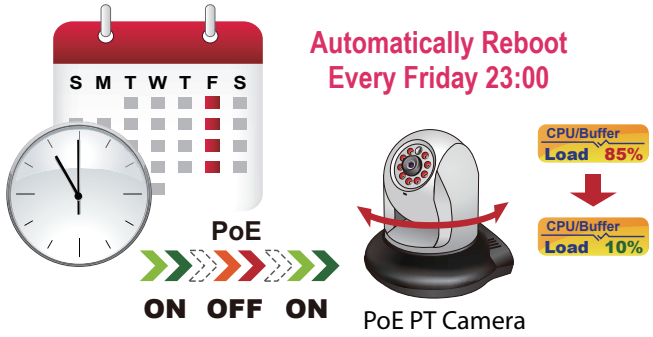
Intelligent Powered Device Alive-Check

The GS-4210-8P2C can be configured to monitor connected PD (powered device) status in real time via ping action. Once the PD stops working and responding, the GS-4210-8P2C will resume the PoE port power and bring the PD back to work. It will greatly enhance the network reliability through the PoE port resetting the PD's power source, thus reducing the administrator's management burden.



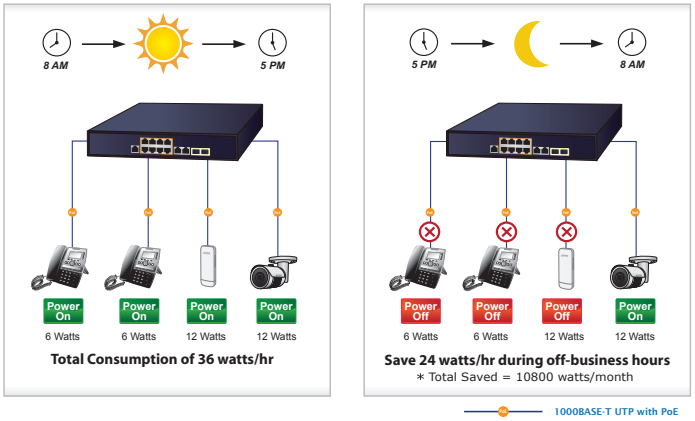
Scheduled Power Recycling

The GS-4210-8P2C allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specified time each week. Therefore, it will reduce the chance of IP camera or AP crash resulting from buffer overflow.



PoE Schedule for Energy Savings

Under the trend of energy savings worldwide and contributing to environmental protection, the GS-4210-8P2C can effectively control the power supply besides its capability of giving high watts power. The **"PoE schedule"** function helps you to enable or disable PoE power feeding for each PoE port during specified time intervals and it is a powerful function to help SMBs or enterprises save power and money. It also increases security by powering off PDs that should not be in use during non-business hours.



MAC address to IP address binding

- 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 SNMPv3 secure access
- 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 via HTTP/TFTP
  - Dual Images
  - Hardware reset button for system reboot or reset to factory default
- SNTP Network Time Protocol
- Cable Diagnostics
- Link Layer Discovery Protocol (LLDP) Protocol and LLDP-MED
- SNMP trap for interface Link Up and Link Down notification
- Event message logging to remote Syslog server
- Four RMON groups (history, statistics, alarms, and events)
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS system and CloudViewer for deployment management