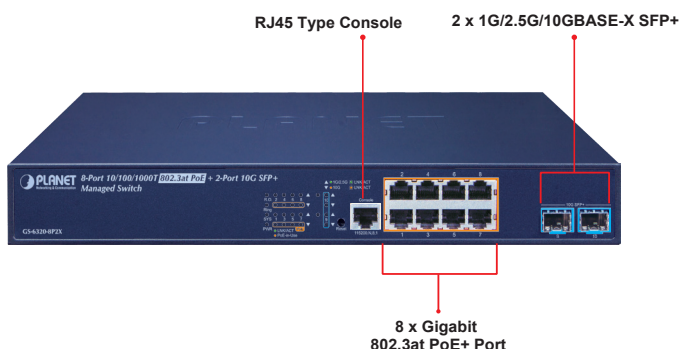
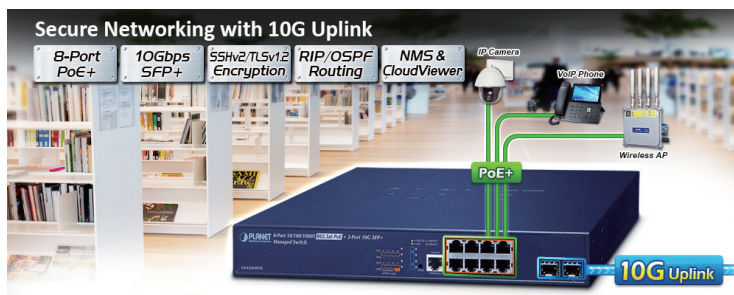


L3 8-Port 10/100/1000T 802.3at PoE + 2-Port 10G SFP+ Managed Switch



Perfect Managed PoE+ Switch with L3/L2 Switching and Security

PLANET GS-6320-8P2X Layer 3 Managed Gigabit Switch supports both **IPv4 and IPv6 protocols and Layer 3 OSPFv2 dynamic routing and static routing**, and provides **8 10/100/1000BASE-T ports featuring 802.3at PoE+ and 2 extra 1/2.5/10 Gigabit BASE-X SFP+ fiber slots**. Each of the eight Gigabit ports provides 36 watts of power, with a total power budget of up to **120 watts** for the different types of PoE applications being employed. It provides a quick, safe and cost-effective Power over Ethernet network solution to IP security surveillance for small businesses and enterprises.



Redundant Ring, Fast Recovery for Critical Network Applications

The GS-6320-8P2X 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 and Spanning Tree Protocol (802.1w RSTP) into customer's network to enhance system reliability and uptime in harsh environments. In a certain simple Ring network, the recovery time could be less than 10ms to quickly bring the network back to normal operation.

Physical Port

- **8-port 10/100/1000BASE-T** with 36W PoE injector function
- **2-port 1G/2.5G/10G BASE-X SFP+**
- RS232 RJ45 console interface for switch basic management and setup

Power over Ethernet

- Up to 8 ports of IEEE 802.3af/802.3at devices powered
- Supports PoE power up to 36 watts for each PoE port
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters
- PoE Management
 - PoE admin-mode control
 - PoE usage threshold
 - Temperature threshold
 - PoE Port Status monitoring
 - PD classification detection
 - Per port PoE function enable/disable
 - Per PoE port power limit
 - PoE Port Power feeding priority
 - PoE extend mode control to support power feeding up to a distance of up to 200 meters
- Intelligent PoE features
 - Temperature threshold control
 - PoE usage threshold control
 - PD alive check
 - PoE schedule

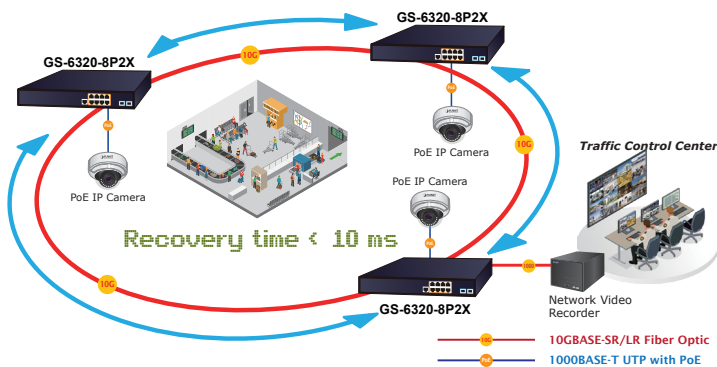
Layer 3 IP Routing Features

- IP dynamic routing protocol supports RIPv2, OSPFv2 and OSPFv3
- IPv4/IPv6 hardware static routing
- Routing interface provides per VLAN routing mode

Layer 2 Features

- High performance of Store-and-Forward architecture and runt/CRC filtering eliminates erroneous packets to optimize the network bandwidth
- Storm Control support
 - Broadcast/Multicast/Unknown unicast

ERPS Ring for Video Transmission Redundancy



Cybersecurity Network Solution to Minimize Security Risks

The cybersecurity feature included to protect the switch management in a mission-critical network virtually needs no effort and cost to install. Both SSHv2 and TLSv1.2 protocols are utilized to provide strong protection against advanced threats. The network administrator can now construct highly-secure corporate networks with considerably less time and effort than before.

Flexible and Extendable 10Gb Ethernet Solution

10G Ethernet is a big leap in the evolution of Ethernet. Each of the 10G SFP+ slots in the GS-6320-8P2X supports **triple speed and 10GBASE-SR/LR or 2500BASE-X and 1000BASE-SX/LX**. With its 2-port, 10G Ethernet link capability, the administrator now can flexibly choose the suitable SFP/SFP+ transceiver according to the transmission distance or the transmission speed required to extend the network efficiently. The GS-6320-8P2X provides broad bandwidth and powerful processing capacity.

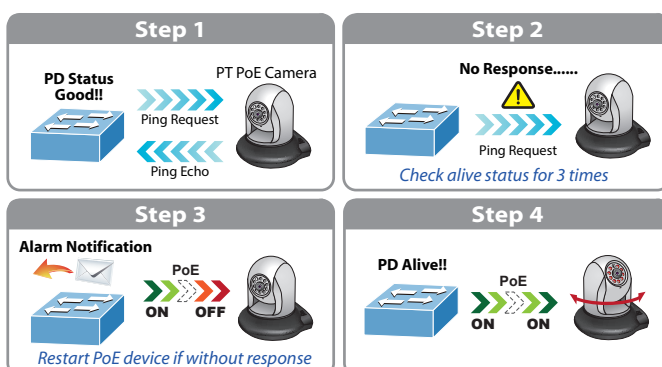
Built-in Unique PoE Functions for Surveillance Management

As a managed PoE Switch for surveillance network, the GS-6320-8P2X features the following intelligent PoE management functions:

- PD Alive Check
- Scheduled Power Recycling
- SMTP/SNMP Trap Event Alert
- PoE Schedule
- PoE Usage Monitoring
- PoE Extension

Intelligent Powered Device Alive Check

The GS-6320-8P2X can be configured to monitor a connected PD status in real time via ping action. Once the PD stops working and it is without response, the GS-6320-8P2X 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 administrator management burden.



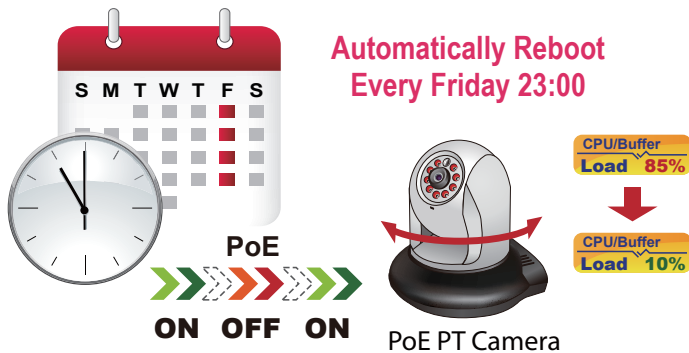
- Supports **VLAN**
 - IEEE 802.1Q tagged VLAN
 - Supports provider bridging (VLAN Q-in-Q, IEEE 802.1ad)
 - Private VLAN Edge (PVE)
 - Protocol-based VLAN
 - MAC-based VLAN
 - Voice VLAN
 - GVRP (GARP VLAN Registration Protocol)
- Supports **Spanning Tree Protocol**
 - IEEE 802.1D Spanning Tree Protocol
 - IEEE 802.1w Rapid Spanning Tree Protocol
 - IEEE 802.1s Multiple Spanning Tree Protocol, spanning tree by VLAN
 - BPDU Guard
- Supports **Link Aggregation**
 - 802.3ad Link Aggregation Control Protocol (LACP)
 - Cisco ether-channel (static trunk)
 - Maximum 5 trunk groups, up to 2 ports per trunk group
 - Up to 40Gbps bandwidth (full duplex mode)
- Provides port mirror (many-to-1)
- Port mirroring to monitor the incoming or outgoing traffic on a particular port
- Loop protection to avoid broadcast loops
- Link Layer Discovery Protocol (LLDP)
- Compatible with Cisco uni-directional link detection (UDLD) that monitors a link between two switches and blocks the ports on both ends of the link if the link fails at any point between the two devices
- Supports G.8032 ERPS (Ethernet Ring Protection Switching)

Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
 - IEEE 802.1p CoS
 - TOS/DSCP/IP Precedence of IPv4/IPv6 packets
 - IP TCP/UDP port number
 - Typical network application
- Strict priority and Weighted Round Robin (WRR) CoS policies
- Supports QoS and In/Out bandwidth control on each port
- Traffic-policing policies on the switch port
- DSCP remarking

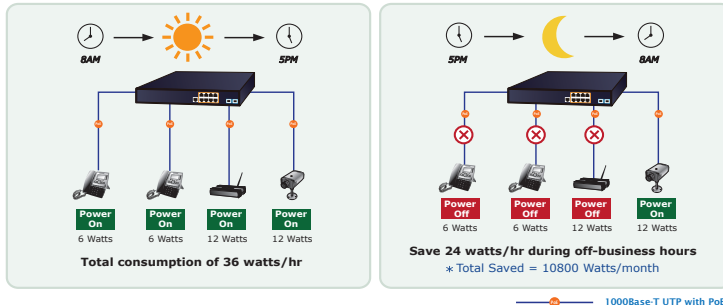
Scheduled Power Recycling

The GS-6320-8P2X allows each of the connected PDs to reboot at a specified time each week. Therefore, it will reduce the chance of PD crash resulting from buffer overflow.



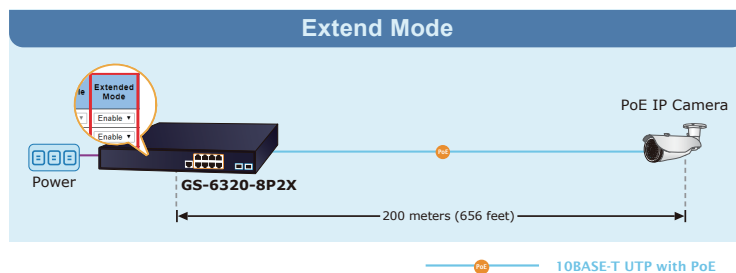
PoE Schedule for Energy Saving

Besides being used for IP surveillance, the GS-6320-8P2X is certainly applicable to build any PoE network including VoIP and wireless LAN. Under the trend of energy saving worldwide and contributing to the environmental protection on the Earth, the GS-6320-8P2X 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 and enterprises save energy and budget.



PoE Power and Ethernet Data Transmission Distance Extension

In the "Extend" operation mode, the GS-6320-8P2X operates on a per-port basis at 10Mbps duplex operation but can support 22-watt PoE power output over a distance of up to 200 meters overcoming the 100m limit on Ethernet UTP cable. With this brand-new feature, the GS-6320-8P2X provides an additional solution for 802.3at/af PoE distance extension, thus saving the cost of Ethernet cable installation.



Multicast

- Supports IGMP Snooping v1, v2 and v3
- Supports MLD Snooping v1 and v2
- Querier mode support
- IPv4 IGMP Snooping port filtering
- IPv6 MLD Snooping port filtering
- Multicast VLAN Registration (MVR) support

Security

- Authentication
 - IEEE 802.1x Port-based/MAC-based network access authentication
 - Built-in RADIUS client to co-operate with the RADIUS servers
 - TACACS+ login users access authentication
 - RADIUS/TACACS+ users access authentication
 - Guest VLAN assigns clients to a restricted VLAN with limited services
- Access Control List
 - IP-based Access Control List (ACL)
 - MAC-based Access Control List
- Source MAC/IP address binding
- **DHCP Snooping** to filter un-trusted DHCP messages
- **Dynamic ARP Inspection** discards ARP packets with invalid MAC address to IP address binding
- **IP Source Guard** prevents IP spoofing attacks
- Auto DoS rule to defend DoS attack
- IP address access management to prevent unauthorized intruder

Management

- IPv4 and IPv6 dual stack management
- Switch Management Interfaces
 - Web switch management
 - Console and Telnet Command Line Interface
 - SNMP v1 and v2c switch management
 - SSHv2, TLSv1.2 and SNMPv3 secure access
- IPv6 IP Address/NTP/DNS management
- Built-in Trivial File Transfer Protocol (TFTP) client
- BOOTP and DHCP for IP address assignment
- System Maintenance
 - Firmware upload/download via HTTP/TFTP
 - Reset button for system reboot or reset to factory default
 - Dual Images
- DHCP Relay