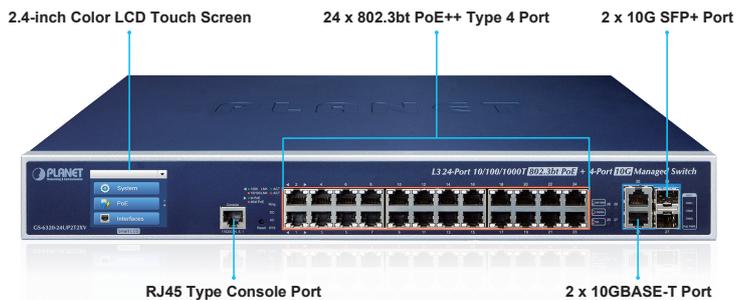


L3 24-Port 10/100/1000T 802.3bt PoE + 2-Port 10GBASE-T + 2-Port 10G SFP+ Managed Switch with LCD Touch Screen and Redundant Power



Powerful 802.3bt PoE Managed Switch with Advanced L2+/L4 Switching and Security

PLANET GS-6320-24UP2T2XV is a cost-optimized, **1.25 U**, Gigabit 802.3bt PoE Managed Switch with **LCD Touch Screen** 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 **24 10/100/1000BASE-T 802.3bt PoE++ ports, 2 10GBASE-T RJ45 ports and 2 additional 10Gigabit SFP+ ports**. With a total power budget of up to 720 watts for different kinds of PoE applications, the GS-6320-24UP2T2XV provides a quick, safe and cost-effective 802.3bt PoE network solution for small businesses and enterprises.



IEEE 802.3bt PoE solutions

The GS-6320-24UP2T2XV supports the 802.3bt standard, supplying up to **95** watts per port for increased requirements of devices. It can offer more PoE applications, such as:

- PoE PTZ speed dome cameras
- Any network device that needs higher PoE power to work normally
- Thin-client
- AIO (All-in-One) touch PC
- Remote digital signage display

Physical Port

- **24 10/100/1000BASE-T** Gigabit RJ45 copper ports with 24-port **IEEE 802.3bt PoE++** injector function
- **2 10GBASE-T** RJ45 interfaces with auto MDI/MDI-X function
- **2 10GBASE-SR/LR SFP+ slots**, compatible with 2500BASE-X and 1000BASE-SX/LX/BX SFP
- RJ45 console interface for switch basic management and setup

802.3bt Power over Ethernet

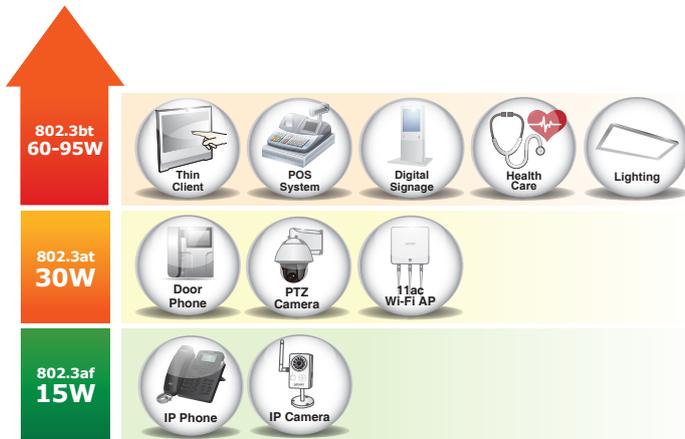
- Complies with IEEE 802.3bt Power over Ethernet Plus Plus
- Backward compatible with IEEE 802.3af/at Power over Ethernet
- Up to 24 ports of IEEE 802.3af/IEEE 802.3at/IEEE 802.3bt PoE devices powered
- 24 PoE ports with built-in 802.3bt PoE++ Type-4 90 W injector function
- Auto detects powered device (PD)
- Circuit protection prevents power interference between ports
- Remote power feeding up to 100 meters
- PoE management
 - Total PoE power budget control
 - Per port PoE function enable/disable
 - PoE admin-mode control
 - PoE port power feeding priority
 - Per PoE port power limitation
 - PD classification detection
 - Temperature threshold control
 - PD alive check
 - PoE schedule
 - PoE extend mode supports power feeding at a distance of up to 160 meters

Intelligent PoE features

- Temperature threshold control
- PoE usage threshold control
- PD alive check
- PoE schedule

Layer 3 Features

- IP dynamic routing protocol supports RIP, OSPFv2 and OSPFv3
- IPv4/IPv6 hardware static routing
- Routing interface provides per VLAN routing mode
- IP interfaces (Max. 128 VLAN interfaces)
- Routing table (Max. 128 static routing entries)



New Color LCD Touch Screen

The unique **Smart LCD PoE Switch** provides an intuitive touch panel on its front panel that facilitates the Ethernet management and PoE PD management. It greatly promotes management efficiency in large-scale networks, such as enterprises, hotels, shopping malls, government buildings, and other public areas, and features the following special management and status functions:

- IP address, VLAN and QoS configuration
- PoE management and status
- Port management and status/SFP information
- Troubleshooting: cable diagnostic and remote IP ping
- Maintenance: reboot, factory default and save configuration



High Performance 10Gbps Ethernet Capacity

The GS-6320-24UP2T2XV offers wire-speed packets transfer performance without the risk of packet loss. The high data throughput of the device makes it ideal for most Gigabit environments. With a 20Gbps internal fabric and auto negotiation support in its 10 Gigabit port, the GS-6320-24UP2T2XV can handle extremely large amounts of data transmission in a secure topology linking to data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

Convenient and Smart ONVIF Devices with Detection Feature

PLANET has newly developed an awesome feature -- ONVIF Support -- which is specifically designed for co-operating with Video IP Surveillances. From the GS-6320-24UP2T2XV GUI, clients just need one click to search and show all of the ONVIF devices via network application. In addition, clients can upload floor images to a switch and it allows you to deploy any surveillance devices for easier inspection and planning. Moreover, clients can get real-time surveillance's information and online/offline status, and also allows PoE reboot control from GUI.

Layer 2 Features

- Storm Control support
 - Broadcast/multicast/unknown unicast
- 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 (STP)
 - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), spanning tree by VLAN
 - BPDU Guard
- Supports Link Aggregation
 - 802.3ad Link Aggregation Control Protocol (LACP)
 - Cisco ether-channel (static trunk)
 - Maximum 26 trunk groups with 4 ports for each trunk group
 - Up to 80Gbps 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
- Supports G.8032 ERPS (Ethernet Ring Protection Switching)
- 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
- Link Layer Discovery Protocol (LLDP)

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 on the switch port
- DSCP remarking



Built-in Unique PoE Functions for Powered Devices Management

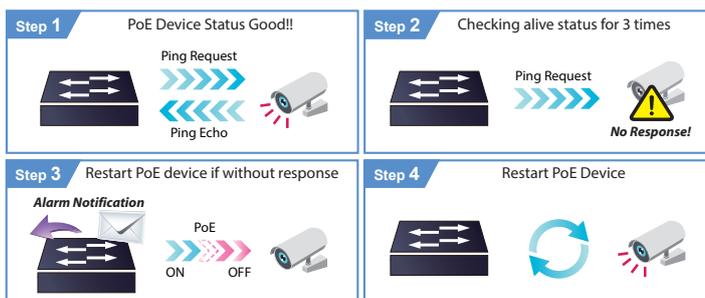
Being the managed PoE switches for surveillance, wireless and VoIP networks, the GS-6320-24UP2T2XV features the following special PoE management functions:

- PD alive check
- Scheduled power recycling
- PoE schedule
- PoE usage monitoring

Intelligent Powered Device Alive Check

The GS-6320-24UP2T2XV 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-6320-24UP2T2XV 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 and reducing administrator management burden.

PD Alive Check



Scheduled Power Recycling

The GS-6320-24UP2T2XV allows each of the connected PoE IP cameras or PoE wireless access points to reboot at a specified time each week. Therefore, they will reduce the chance of IP camera or AP crash resulting from buffer overflow.



Multicast

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

Security

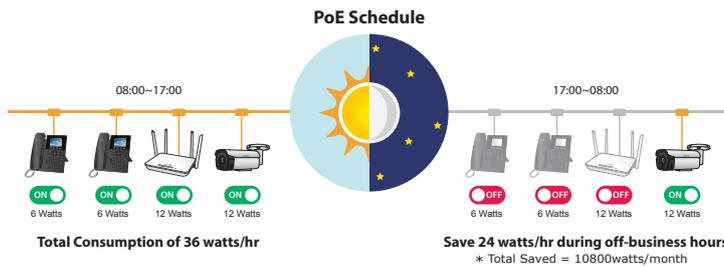
- Authentication
 - IEEE 802.1x port-based/MAC-based network access authentication
 - Built-in RADIUS client to cooperate with the RADIUS servers
 - TACACS+ login users access authentication
 - RADIUS/TACACS+ users access authentication
- Access Control List
 - IP-based Access Control List (ACL)
 - MAC-based Access Control List
- Source MAC/IP address binding
- DHCP Snooping to filter untrusted DHCP messages
- Dynamic ARP Inspection discards ARP packets with invalid MAC address to IP address binding
- IP Source Guard prevents IP spoofing attacks
- IP address access management to prevent unauthorized intruder

Management

- IPv4 and IPv6 dual stack management
- Switch Management Interfaces
 - Console/Telnet Command Line Interface
 - Web switch management
 - SNMP v1, v2c, and v3 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
- 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 and DHCP Option 82
- DHCP Server
- User Privilege levels control

PoE Schedule for Energy Saving

Under the trend of energy saving worldwide and contributing to environmental protection, the GS-6320-24UP2T2XV can effectively control the power supply besides their 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.



PoE Usage Monitoring

Via the power usage chart in the web management interface, the GS-6320-24UP2T2XV enables the administrator to monitor the status of the power usage of the connected PDs in real time. Thus, it greatly enhances the management efficiency of the facilities.

10GBASE-T and 10GBASE-X SFP Dual Media Interfaces for Diversified Bandwidth Applications

The GS-6320-24UP2T2XV has the capability to reach a high speed of 10Gbps over copper or fiber-optic cabling which helps to accelerate the performance of large data transmission. The built-in 10GBASE-T copper interfaces support 5-speed (10G/5G/2.5G/1G/100) auto-negotiation, and 10Gbps data transmission with the existing Cat6A/Cat7 UTP cabling, meaning the speed can be increased without costs. It can definitely give you the speed you demand and its Plug and Play makes installation easy.

The fiber-optic 10GBASE-X SFP+ interfaces support 3 speeds, 10GBASE-SR/LR, 2500BASE-X and 1000BASE-SX/LX, meaning 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.

Redundant AC/DC Power Input for Continuous System Operation

The GS-6320-24UP2T2XV is equipped with one 100–240 V AC power input and one 36–60 V DC power input, providing flexible installation and redundant power options to ensure continuous system operation.

- When powered by AC, the switch fully supports PoE for connected devices.
- When using DC power, the switch continues network operation but PoE output is disabled.

If both AC and DC are connected, AC power takes priority for PoE. In case AC power fails, the switch stays online with DC power, ensuring data connectivity without PoE interruption.

- NTP (Network Time Protocol)
- Network Diagnostic
 - ICMPv6/ICMPv4 remote ping
 - Cable diagnostic technology provides the mechanism to detect and report potential cabling issues
- SMTP/Syslog remote alarm
- System Log
- PLANET Smart Discovery Utility for deployment management
- PLANET UNI-NMS (Universal Network Management), cloud-based CloudNMS and app for deployment management
- Provides ONVIF for cooperating with PLANET IP video surveillance
- Smart fan with speed control

Redundant Power System

- Redundant 100~240V AC/36-60V DC dual power
- Active-active redundant power failure protection
- Backup of catastrophic power failure on one supply
- Fault tolerance and resilience

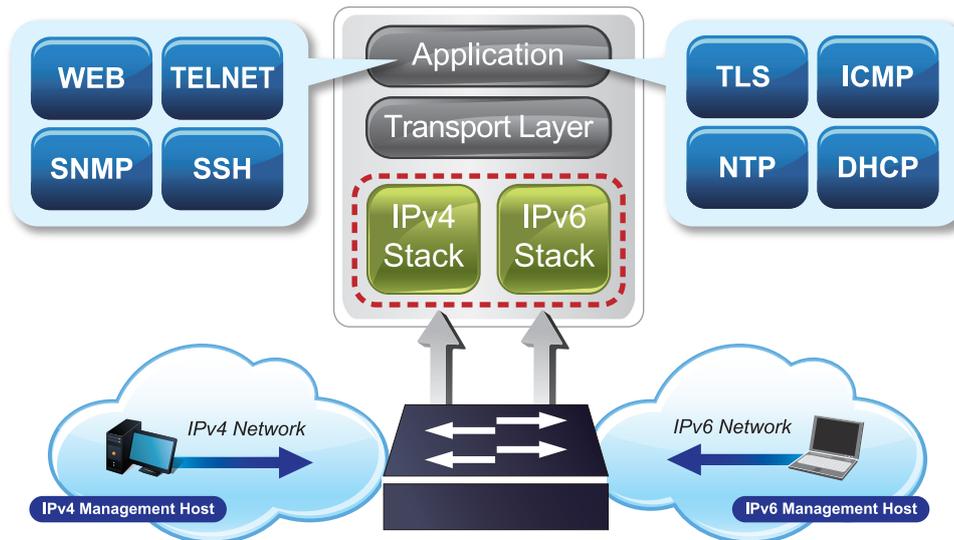


Environment-friendly, Smart Fan Design for Silent Operation

The GS-6320-24UP2T2XV features a 19-inch metal housing, a low noise design and an effective ventilation system. It supports the smart fan technology that automatically controls the speed of the built-in fan to reduce noise and maintain the temperature of the PoE switch for optimal power output capability. The GS-6320-24UP2T2XV is able to operate reliably, stably and quietly in any environment without affecting its performance.

Solution for IPv6 Networking

By supporting IPv6/IPv4 dual stack and plenty of management functions with easy and friendly-user interfaces, the GS-6320-24UP2T2XV is the best choice for IP surveillance, VoIP and wireless service providers to deploy the IPv6 network. It also helps the SMBs to step in the IPv6 era with the lowest investment but not necessary to replace the network facilities while the ISPs construct the IPv6 FTTx edge network.

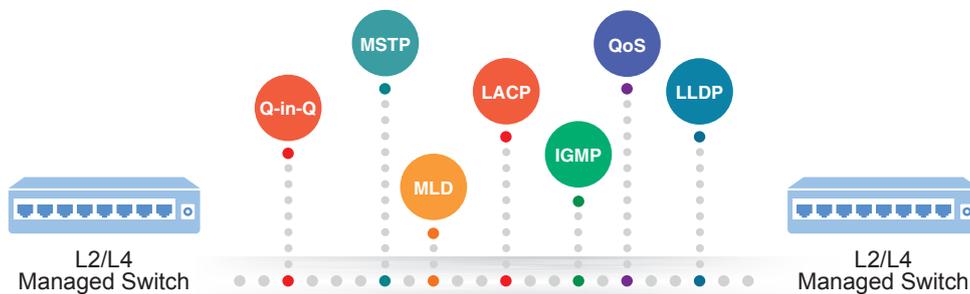


IPv4 and IPv6 VLAN Routing for Secure and Flexible Management

To help customers stay on top of their businesses, the GS-6320-24UP2T2XV not only provides ultra high transmission performance and excellent Layer 2 technologies, but also offers IPv4/IPv6 VLAN routing feature which allows to cross over different VLANs and different IP addresses for the purpose of having a highly-secure, flexible management and simpler networking application.

Robust Layer 2 Features

The GS-6320-24UP2T2XV can be programmed for advanced switch management functions, such as dynamic port link aggregation, **Q-in-Q VLAN**, **Multiple Spanning Tree Protocol (MSTP)**, Layer 2/4 QoS, bandwidth control and **IGMP/MLD snooping**. The GS-6320-24UP2T2XV allows the operation of a high-speed trunk combining multiple ports. It consists of a maximum of 14 trunk groups with 4 ports for each group, and supports connection fail-over as well.



Powerful Security

The GS-6320-24UP2T2XV offers a comprehensive **Layer 2 to Layer 4 access control list (ACL)** for enforcing security to the edge. It can be used to restrict to network access by denying packets based on source and destination IP address, TCP/UDP port number or defined typical network applications. Its protection mechanism also comprises **802.1x Port-based** and **MAC-based** user and device authentication. With the **private VLAN** function, communication between edge ports can be prevented to ensure user privacy.

Enhanced Security and Traffic Control

The GS-6320-24UP2T2XV also provides **DHCP Snooping**, **IP Source Guard** and **Dynamic ARP Inspection** functions to prevent IP snooping from attack and discard ARP packets with invalid MAC address. The network administrator can now construct highly-secure corporate networks with considerably less time and effort than before.

User-friendly Secure Management

For efficient management, the GS-6320-24UP2T2XV is equipped with console, Web and SNMP management interfaces.

- With the built-in **Web-based** management interface, it offers an easy-to-use, platform-independent management and configuration facility.
- For **text-based** management, it can be accessed via Telnet and the console port.
- For standard-based monitor and management software, it offers SNMPv3 connection which encrypts the packet content at each session for secure remote management.



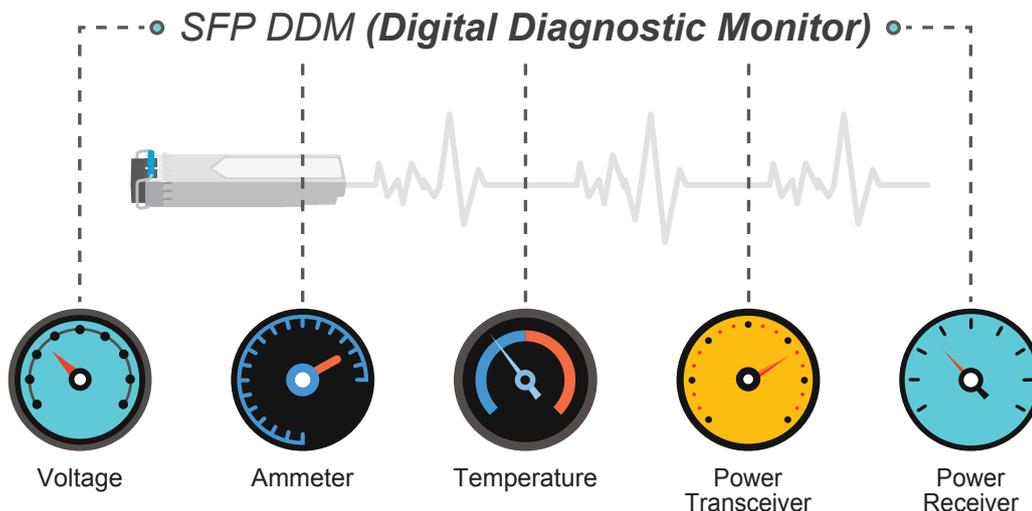
Remote Management Solution

PLANET's **Universal Network Management System (UNI-NMS)** and Cloud-based CloudNMS and app support IT staff by remotely managing all network devices and monitoring PDs' operational statuses. Thus, they're designed for both the enterprises and industries where deployments of PDs can be as remote as possible, without having to go to the actual location once a bug or faulty condition is found. With the UNI-NMS or CloudNMS, all kinds of businesses can now be speedily and efficiently managed from one platform.



Intelligent SFP/SFP+ Diagnosis Mechanism

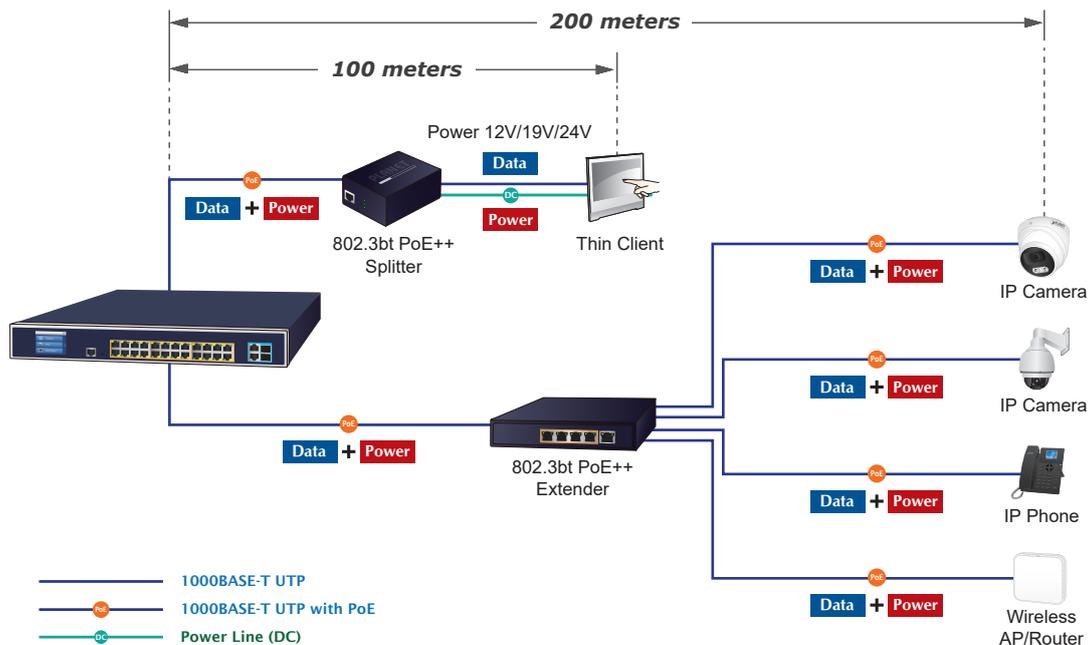
The GS-6320-24UP2T2XV supports **SFP-DDM (Digital Diagnostic Monitor)** function that greatly helps network administrator to easily monitor real-time parameters of the SFP and SFP+ transceivers, such as optical output power, optical input power, temperature, laser bias current, and transceiver supply voltage.



Applications

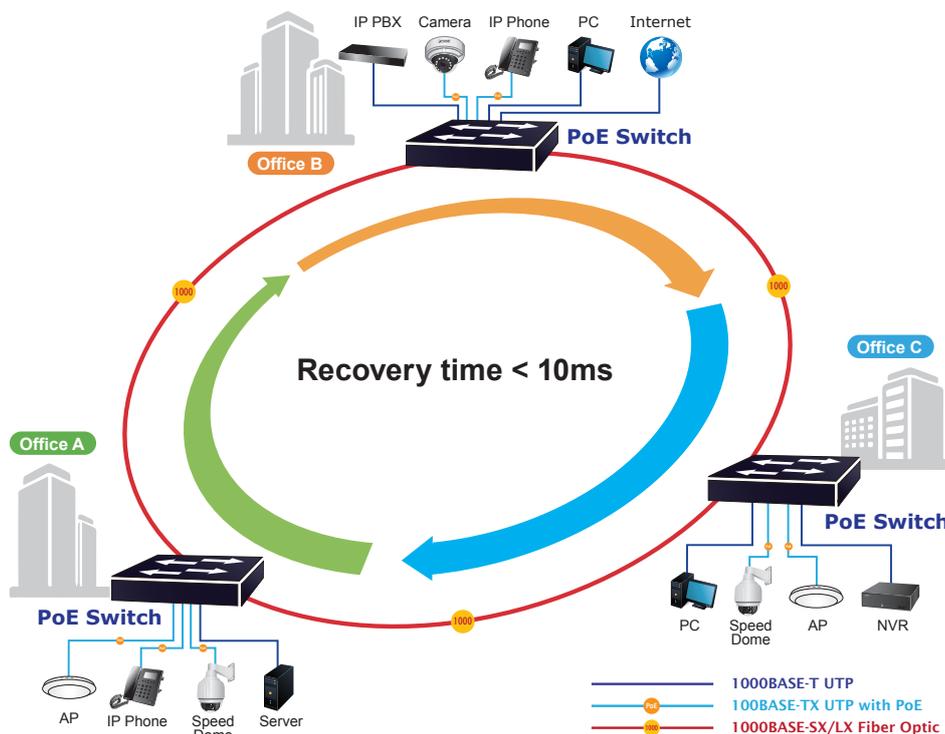
IEEE 802.3bt PoE++ Networking Solution

PLANET GS-6320-24UP2T2XV can easily build an 802.3bt PoE++ networking solution on the cyber security system for the enterprises. For instance, it can work with the POS system and thin client to perform comprehensive security protection for today's businesses. The GS-6320-24UP2T2XV and POE-173S/IPOE-173S 802.3bt PoE++ Splitter operate as a pair to provide the easiest way to power your Ethernet devices which need high power input. Receiving data and power from the GS-6320-24UP2T2XV, the POE-173S/IPOE-173S separates digital data and power into several optional outputs (12 V, 19 V or 24 V DC) to non-PoE devices such as laptops, thin client, POS system, PTZ (pan, tilt & zoom) network cameras, PTZ speed dome cameras, color touch-screen IP phones, multi-channel wireless LAN access points and other network devices at distance up to 100 meters.



Optimal Redundant Ring for Faster Recovery of Managed Network

The GS-6320-24UP2T2XV 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 50ms to quickly bring the network back, thus enabling the management network to keep on operating.



Specifications

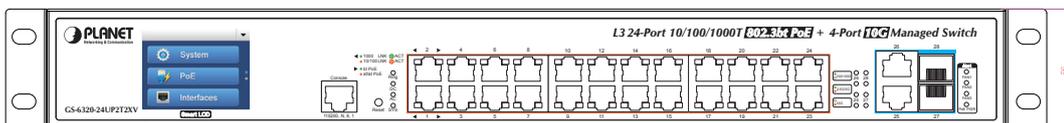
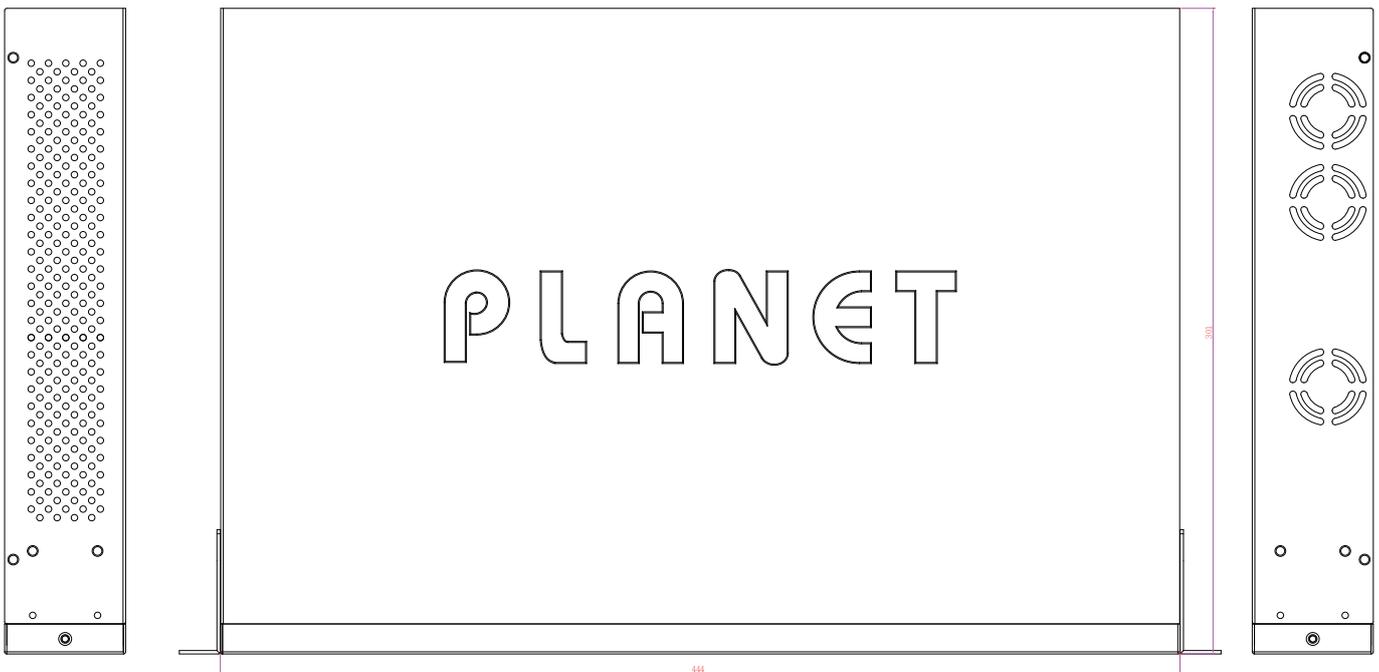
Product	GS-6320-24UP2T2XV
Hardware Specifications	
Copper Ports	24 10/100/1000BASE-T RJ45 auto-MDI/MDI-X ports 2 10GBASE-T RJ45 ports auto negotiation (Ports 25 to 26), supports 10G/5G/2.5G/1G/100Mbps data rate
SFP+ Slots	2 10GBASE-SR/LR SFP+ interfaces (Ports 27 to 28) Compatible with 1000BASE-SX/LX/BX SFP transceiver
Console	1 x RJ45 serial port (115200, 8, N, 1)
RING	Supports ERPS and complies with ITU-T G.8032 Recovery time < 50 ms
Reset Button	< 5 sec: System reboot > 5 sec: Factory default
Dimensions (W x D x H)	440 x 300 x 56 mm, 1.25 U height
Weight	5417 g
Power Consumption	Max. 835 watts/ 2849.14 BTU
Power Requirements – AC	AC 100~240 V, 50/60 Hz, 8 A Both the system and PoE functions operate normally, supplying power to connected PD devices
Power Requirements – DC	DC 36~60 V, 2A The switch remains operational for data transmission, but PoE output is disabled
ESD Protection	5K V DC
Fan	3 smart fans
LED	System: SYS (Green) AC (Green) DC (Green) Ring (Green) Fan1/2/3 Alert (Red) PoE PWR Alert (Red) PoE Ethernet Interfaces (Ports 1 to 24): af/at PoE (Amber) bt PoE/UPOE (Green) Ethernet Interfaces (Ports 1 to 24): 1000 LNK/ACT (Green), 10/100 LNK/ACT (Amber) 10GBASE-T Interfaces (Ports 25 to 26): 1G (Green), 2.5G/5G (Green + Amber), 10G (Amber) 1/10G SFP+ Interfaces (Ports 27 to 28): 1G (Green), 2.5G (Green + Amber), 10G (Amber)
Hardware Specifications	
Switch Architecture	Store-and-Forward
Switch Fabric	128 Gbps/non-blocking
Throughput	95.23 Mbps@64Bytes
Address Table	32K entries, automatic source address learning and aging
Shared Data Buffer	32 Mbits
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Jumbo Frame	10K bytes
Power over Ethernet	
PoE Standard	802.3bt PoE++ PSE Backward compatible with IEEE 802.3af/802.3at PoE PSE
PoE Power Supply Type	<ul style="list-style-type: none"> ■ 802.3bt ■ UPoE ■ End-span ■ Mid-span ■ Force
PoE Power Output	Per port 52V DC <ul style="list-style-type: none"> - 802.3bt Type-4 mode: Port-1 to Port-24: maximum 90 watts - UPoE mode: Port-1 to Port-24: maximum 95 watts - End-span mode: maximum 36 watts - Mid-span mode: maximum 36 watts - Force mode: maximum 90 watts

Power Pin Assignment	<ul style="list-style-type: none"> ■ 802.3bt: 1/2(-), 3/6(+), 4/5(+), 7/8(-) ■ UPoE: 1/2(-), 3/6(+), 4/5(+), 7/8(-) ■ End-span: 1/2(-), 3/6(+) ■ Mid-span: 4/5(+), 7/8(-)
PoE Power Budget	<p>720 watts (max.) @ < 40 degrees C operating temperature</p> <p>660 watts (max.) @ 40 to 49 degrees C operating temperature</p> <p>600 watts (max.) @ 50 degrees C operating temperature</p>
Number of 90w 802.3bt Type-4 PDs	8 units
Number of 60w 802.3bt Type-3 PDs	12 units
Number of 30w 802.3at PDs	24 units
PoE Management Functions	
PoE System Management	<p>PoE Port status monitoring</p> <p>Total PoE power budget control</p> <p>Over temperature protection</p> <p>PoE usage threshold and temperature threshold</p>
PoE Device Live Detection	<p>Per port remote PD IP address</p> <p>4 actions</p> <ul style="list-style-type: none"> - None - PD reboot - PR reboot and alarm <p>Alarm</p>
PoE Power Recycling	Daily or predefined schedule
PoE Schedule	4 schedule profiles
PoE Extend Mode	Max. 160 meters
Layer 3 Functions	
IP Interfaces	Max. 128 VLAN interfaces
Routing Table	<p>Max. 128 routing entries</p> <p>Max. 4K H/W routing table entries</p>
Routing Protocols	<p>IPv4 RIPv1/v2</p> <p>IPv4 OSPFv2</p> <p>IPv4 hardware static routing</p> <p>IPv6 OSPFv3</p> <p>IPv6 hardware static routing</p>
Layer 2 Management Functions	
Port Configuration	<p>Port disable/enable</p> <p>Auto-negotiation 10/100/1000Mbps full and half duplex mode selection</p> <p>Flow control disable/enable</p> <p>Port link capability control</p>
Port Status	Display each port's speed duplex mode, link status, flow control status, auto-negotiation status, trunk status
Port Mirroring	<p>TX/RX/Both</p> <p>Many-to-1 monitor</p>
VLAN	<p>802.1Q tagged VLAN</p> <p>802.1ad Q-in-Q tunneling</p> <p>Private VLAN Edge (PVE)</p> <p>MAC-based VLAN</p> <p>Protocol-based VLAN</p> <p>Voice VLAN</p> <p>MVR (Multicast VLAN registration)</p> <p>GVRP</p> <p>Up to 4K VLAN groups, out of 4095 VLAN IDs</p>
Spanning Tree Protocol	<p>IEEE 802.1D Spanning Tree Protocol (STP)</p> <p>IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)</p> <p>IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)</p> <p>BPDU Guard</p>
Link Aggregation	<p>IEEE 802.3ad LACP/static trunk</p> <p>14 trunk groups with 4 ports per trunk</p>
IGMP Snooping	<p>IPv4 IGMP (v1/v2/v3) snooping</p> <p>IPv4 IGMP querier mode support</p> <p>IPv4 IGMP Snooping port filtering</p> <p>Up to 255 multicast groups</p>
MLD Snooping	<p>IPv6 MLD (v1/v2) snooping</p> <p>IPv6 MLD querier mode support</p> <p>Up to 255 multicast groups</p>

Ring	Supports ERPS, and complies with ITU-T G.8032 Recovery time < 10ms @ 3 nodes Recovery time <50ms @ 16 nodes Supports major ring and sub-ring
QoS	Traffic classification based, strict priority and WRR 8-level priority for switching: - Port number - 802.1p priority - 802.1Q VLAN tag - DSCP/ToS field in IP packet
Bandwidth Control	Per port bandwidth control Ingress: 10kbps~13000Mbps Egress: 10kbps~13000Mbps
Security Functions	
Access Control List	IP-based ACL/MAC-based ACL ACL based on: - MAC Address - IP Address - EtherType - Protocol Type - VLAN ID - DSCP - 802.1p Priority Up to 512 entries
Security	Port security IP source guard, up to 512 entries Dynamic ARP inspection, up to 1K entries Command line authority control based on user level Static MAC address, up to 64 entries
AAA	RADIUS client TACACS+ client
Network Access Control	IEEE 802.1x port-based network access control MAC-based authentication Local/RADIUS authentication
Management	
Basic Management Interfaces	Console; Telnet; Web browser; SNMP v1, v2c
Secure Management Interfaces	SSHv1/SSHv2, TLSv1.2, SNMP v3
System Management	Firmware upgrade by HTTP protocol through Ethernet network Configuration upload/download through HTTP Remote syslog System log LLDP protocol NTP PLANET Smart Discovery Utility PLANET CloudViewer app
Event Management	Remote syslog System log SMTP
ONVIF	ONVIF device discovery ONVIF device monitoring Floor map
SNMP MIBs	RFC 1213 MIB-II RFC 1493 Bridge MIB RFC 1643 Ethernet MIB RFC 2863 Interface MIB RFC 2665 Ether-Like MIB RFC 2819 RMON MIB (Groups 1, 2, 3 and 9) RFC 2737 Entity MIB RFC 2618 RADIUS Client MIB RFC 2863 IF-MIB RFC 2933 IGMP-STD-MIB RFC 3411 SNMP-Frameworks-MIB RFC 4292 IP Forward MIB RFC 4293 IP MIB RFC 4836 MAU-MIB IEEE 802.1X PAE LLDP MAU-MIB
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE

Standards Compliance	<p>IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX/100BASE-FX IEEE 802.3z Gigabit SX/LX IEEE 802.3ab Gigabit 1000T IEEE 802.3ae 10Gb/s Ethernet IEEE 802.3x flow control and back pressure IEEE 802.3ad port trunk with LACP IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol IEEE 802.1s Multiple Spanning Tree Protocol IEEE 802.1p Class of Service IEEE 802.1Q VLAN tagging IEEE 802.1x Port Authentication Network Control IEEE 802.1ab LLDP IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus</p>	<p>IEEE 802.3bt PoE++ RFC 768 UDP RFC 783 TFTP RFC 791 IP RFC 792 ICMP RFC 2068 HTTP RFC 1058 RIP v1 RFC 2453 RIP v2 RFC 1112 IGMP v1 RFC 2236 IGMP v2 RFC 3376 IGMP v3 RFC 2710 MLD v1 RFC 3810 MLD v2 RFC 2328 OSPF v2 RFC 2740 OSPF v3 ITU-T G.8032 ERPS Ring</p>
Environment		
Operating	<p>Temperature: 0 ~ 50 degrees C Relative Humidity: 5 ~ 95% (non-condensing)</p>	
Storage	<p>Temperature: -10 ~ 70 degrees C Relative Humidity: 5 ~ 95% (non-condensing)</p>	

Dimensions



Unit : mm

Ordering Information

GS-6320-24UP2T2XV	L3 24-Port 10/100/1000T 802.3bt PoE + 2-Port 10GBEAS-T + 2-Port 10G SFP+ Managed Switch with LCD Touch Screen and Redundant Power
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Related Products

GS-6322-24P4X	L3 24-Port 10/100/1000T 802.3bt PoE + 2-Port 10GBASE-T + 2-Port 10G SFP+ Managed Switch with Dual Modular Power Supply Slots
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Available 10Gbps Modules

MTB-LB40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1330nm RX:1270nm)
MTB-LA40	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 40km (TX:1270nm RX:1330nm)
MTB-LB20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1330nm RX:1270nm)
MTB-LA20	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 20km (TX:1270nm RX:1330nm)
MTB-SR	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 300m
MTB-LR	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 10km
MTB-LA60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1270nm RX:1330nm)
MTB-LB60	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 60km (TX:1330nm RX:1270nm)
MTB-RJ	1-Port 10GBASE-T SFP+ Copper Fiber Optic Module - 30m
MTB-LR40	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 40km
MTB-SR2	1-Port 10GBASE-SR SFP+ Fiber Optic Module - 2km
MTB-LR20	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 20km
MTB-LR60	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 60km
MTB-LR80	1-Port 10GBASE-LR SFP+ Fiber Optic Module - 80km
MTB-LA10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1270nm RX:1330nm)
MTB-LB10	1-Port 10GBASE-BX SFP+ Fiber Optic Module - 10km (TX:1330nm RX:1270nm)

Available 2500Mbps Modules

MGB-2GSR	2.5G SFP Transceiver (Multi-mode, 850nm, DDM, 0~70 degrees C) - 300m
MGB-2GLA20	2.5G SFP Transceiver (Single mode WDM, TX:1310nm RX:1550nm, DDM, 0~70 degrees C) - 20km
MGB-2GLB20	2.5G SFP Transceiver (Single mode WDM, TX:1550nm RX:1310nm, DDM, 0~70 degrees C) - 20km
MGB-2GLR20	2.5G SFP Transceiver (Single mode, 1310nm, DDM) - 20km
MGB-2GLR2	2.5G SFP Transceiver (Single mode, 1310nm, DDM) - 2km

Available 1000Mbps Modules

MGB-GT	SFP-Port 1000BASE-T Module
MGB-LX	SFP-Port 1000BASE-LX Mini-GBIC Module - 20km
MGB-SX	SFP-Port 1000BASE-SX Mini-GBIC Module - 550m
MGB-SX2	SFP-Port 1000BASE-SX Mini-GBIC Module - 2km
MGB-L40	SFP-Port 1000BASE-LX Mini-GBIC Module - 40km
MGB-L80	SFP-Port 1000BASE-LX Mini-GBIC Module - 80km
MGB-L120	SFP-Port 1000BASE-LX Mini-GBIC Module - 120km
MGB-LA10	SFP-Port 1000BASE-BX (WDM, TX:1310nm) Mini-GBIC Module - 10km
MGB-LB10	SFP-Port 1000BASE-BX (WDM, TX:1550nm) Mini-GBIC Module - 10km
MGB-LA20	SFP-Port 1000BASE-BX (WDM, TX:1310nm) Mini-GBIC Module - 20km
MGB-LB20	SFP-Port 1000BASE-BX (WDM, TX:1550nm) Mini-GBIC Module - 20km
MGB-LA40	SFP-Port 1000BASE-BX (WDM, TX:1310nm) Mini-GBIC Module - 40km
MGB-LB40	SFP-Port 1000BASE-BX (WDM, TX:1550nm) Mini-GBIC Module - 40km
MGB-LA80	SFP-Port 1000BASE-BX (WDM, TX:1490nm) Mini-GBIC Module - 80km
MGB-LB80	SFP-Port 1000BASE-BX (WDM, TX:1550nm) Mini-GBIC Module - 80km