Layer 3 8-Port 10GBASE-T 95W 802.3bt PoE + 4-Port 10GBASE-X SFP+ Managed Ethernet Switch

All-Port 10G L3 Managed Switch with an Exceptional 95W PoE++ Capability

PLANET XGS-6320-8UP4X **Layer 3 10Gbps Ethernet PoE++ Switch** is designed for high bandwidth and power-hungry devices like Wi-Fi 7/6E APs, NAS units, thin clients, and surveillance systems. Boasting **8 10GBASE-T copper ports and 4 10GBASE-X SFP+ fiber ports**, it ensures flexible connectivity with extended reach.

With a robust **420W PoE budget**, each copper port supplies a maximum of **95W PoE power**, **meeting IEEE 802.3bt PoE++ Type 4 PD device** demands. Beyond power, the switch excels in data link capability, hardware-based **Layer 3 routing**, and a cutting-edge Layer 2 and Layer 4 switching engine. User-friendly IPv6/IPv4 management interfaces ensure seamless control.

Designed for metropolitan areas, smart cities, and enterprises, the XGS-6320-8UP4X empowers next-gen, high-bandwidth networks. Network performance can be elevated with PLANET's forward-thinking Ethernet PoE switch.
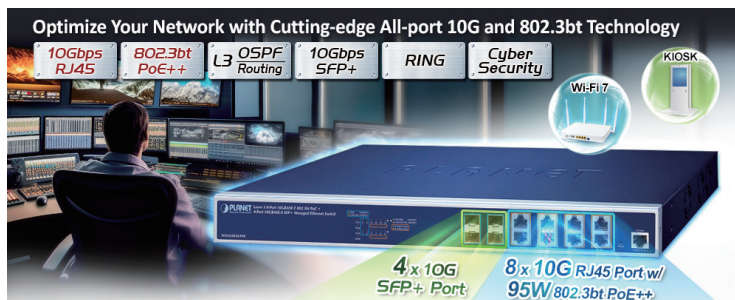
10GBASE-T and 10GBASE-X SFP Dual Media Interfaces for Diversified Bandwidth Applications

PLANET's XGS-6320-8UP4X 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 Cat6/Cat6A 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.

Physical Port

- **XGS-6320-8UP4X**
  - **8 10GBASE-T RJ45** ports, backward compatible with 100/1G/2.5G/5GBASE-T auto-negotiation and supports IEEE802.3bt PoE++ standard
  - **4 10GBASE-X SFP+** ports, backward compatible with 1000BASE-X and 2500BASE-X SFP transceivers
- RJ45 type RS232 console interface for switch basic management

IEEE 802.3bt Power over Ethernet

- Compliant with IEEE 802.3bt Type-4 PoE++ standard
- Backward compatible with IEEE 802.3af/at PD device
- Each port has a maximum power output of 95 watts (Using the maximum amount may reduce the number of available ports.)
- Total of 420-watt PoE budget
- Detects powered devices (PD) automatically.
- Circuit protection prevents power interference between ports.
- Power feeding up to 100m
- PoE management features
  - Total PoE power budget control
  - Per port PoE function enable/disable
  - PoE admin-mode control
  - PoE port power feeding priority
  - Per PoE port power limit
  - PD classification detection
- Intelligent PoE features
  - Temperature threshold setting
  - PoE usage threshold setting
  - PD alive check
  - PoE schedule
  - LLDP PoE Neighbors

Layer 3 IP Routing Features

- IPv4 dynamic routing protocol supports RIPv2 and OSPFv2 and IPv6 OSPFv3
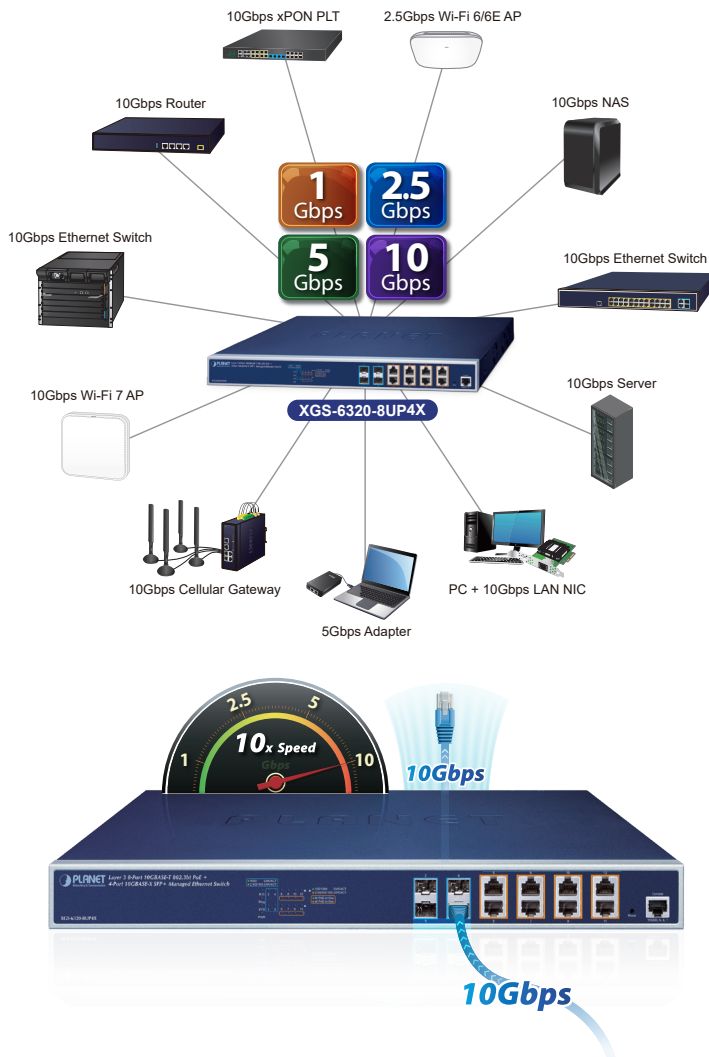
The fiber-optic 10GBASE-X SFP+ interfaces support 3 speeds, 10GBASE-SR/LR, 2500BASE-X and 1000BASE-SX/LX, meaning the administrator now can flexibly choose the suitable SFP/SFP+ transceiver according to the transmission distance or the transmission speed required to extend the network efficiently.

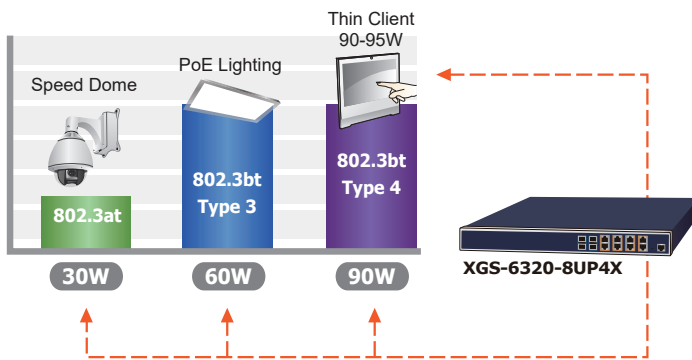### High Power and Full-speed Data Delivered over 4-pair UTP Cabling

The XGS-6320-8UP4X meets the standards of IEEE 802.bt PoE++ technology and has a total power capacity of 420 watts. It can supply up to 95 watts of power to each PoE-compliant powered device (PD) using all four pairs of standard Cat5e/6 Ethernet cabling, ensuring high power and full-speed data delivery. Compared to the conventional 802.3at PoE+, it offers triple power capacity, making it the perfect solution for higher power consuming PDs, including:

- High-definition PoE PTZ speed dome cameras
- Network devices
- Thin clients
- AIO (all-in-one) touch PCs, point of sale (POS) and information kiosks
- Remote digital signage displays
- PoE lightings

- IPv6 dynamic routing protocol supports OSPFv3
- IPv4/IPv6 hardware static routing
- Routing interface provides per VLAN routing mode

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
  - 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 8 trunk groups, up to 16 ports per trunk group
- 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 ITU-T G.8032 ERPS (Ethernet Ring Protection Switching)

Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control

Thin Client
90-95W

PoE Lighting

Speed Dome

802.3bt
Type 4

802.3bt
Type 3

802.3at

30W   60W   90W

XGS-6320-8UP4X

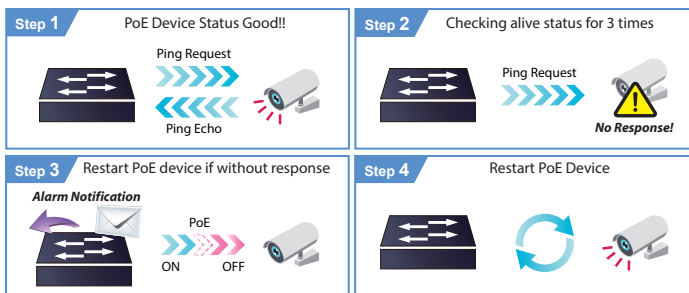### 802.3bt PoE++ and Advanced PoE Power Output Mode Management

To meet the demand for supplying stable PoE power to various powered devices, the XGS-6320-8UP4X switch offers five different PoE power output modes for selection.

- ■ **95W 802.3bt PoE++ Power Output Mode**
- ■ **95W Force Power Output Mode**
- ■ **36W End-span PoE Power Output Mode**
- ■ **36W Mid-span PoE Power Output Mode**

Intelligent Alive Check for Powered Devices

The XGS-6320-8UP4X can be configured to monitor the status of connected powered devices (PDs) in real time through ping action. If a PD stops working and responding, the XGS-6320-8UP4X will recycle the PoE port power and bring the PD back to working condition. This greatly enhances reliability, as the assigned PoE port automatically reboots the PD, reducing the administrator's management burden.

PD Alive Check

Step **1**   PoE Device Status Good!!

Ping Request

Ping Echo

Step **2**   Checking alive status for 3 times

Ping Request

No Response!

Step **3**   Restart PoE device if without response

Alarm Notification

PoE

ON   OFF

Step **4**   Restart PoE Device

PoE Scheduling to Save Energy

By implementing the "PoE schedule" function, businesses can reduce their energy consumption during non-business hours or periods of low network usage. This not only helps to reduce energy costs but also minimizes the overall carbon footprint of the organization.

- • 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
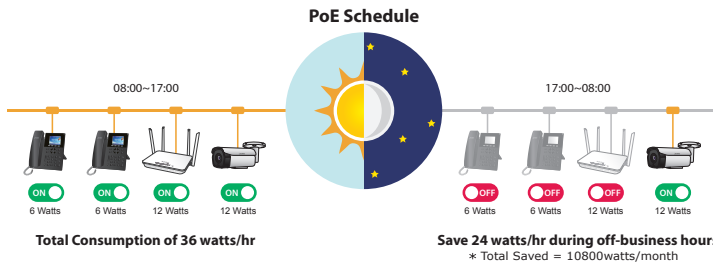- • Traffic-policing on the switch port
- • DSCP remarking

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 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
- • IP address access management to prevent unauthorized intruder

Furthermore, the XGS-6320-8UP4X's PoE scheduling feature provides a convenient and easy-to-use interface for managing power usage. The user can easily set the time intervals for each PoE port, allowing for more efficient power management.

PoE Schedule

08:00~17:00   17:00~08:00

| ON | ON | ON | ON | | OFF | OFF | OFF | ON |
| 6 Watts | 6 Watts | 12 Watts | 12 Watts | | 6 Watts | 6 Watts | 12 Watts | 12 Watts |

Total Consumption of 36 watts/hr   **Save 24 watts/hr during off-business hours**
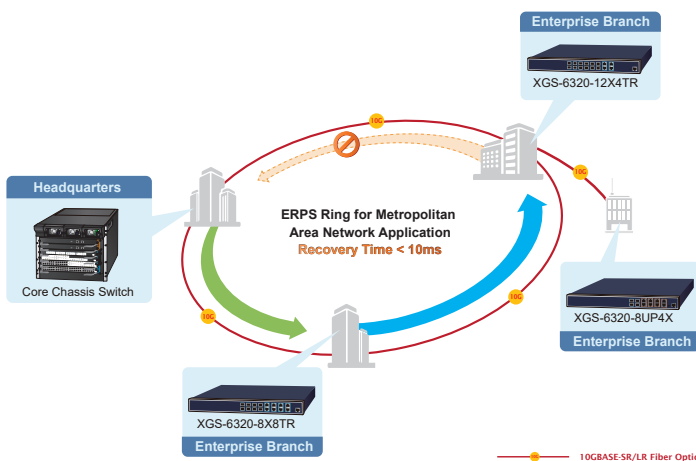∗ Total Saved = 10800watts/month

Scheduled Power Recycling

The XGS-6320-8UP4X enables connected PoE IP cameras or PoE wireless access points to reboot at a specific time each week. This will reduce the chance of IP camera or AP crashes resulting from buffer overflow.

IP Camera

AP Router   IP Phone

S M T W T F S

PoE lighting   Door Phone

Automatically Reboot
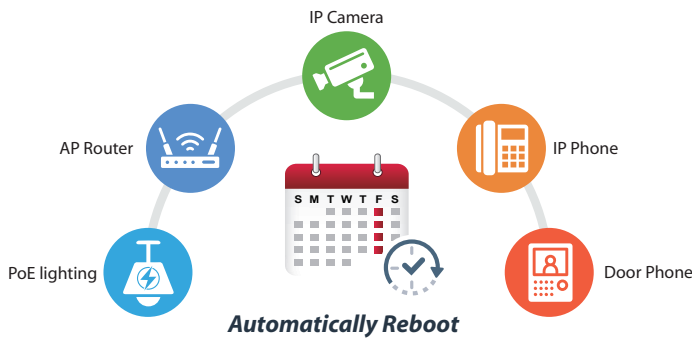
Redundant Ring, Fast Recovery for Critical Network Applications

The XGS-6320 series 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.
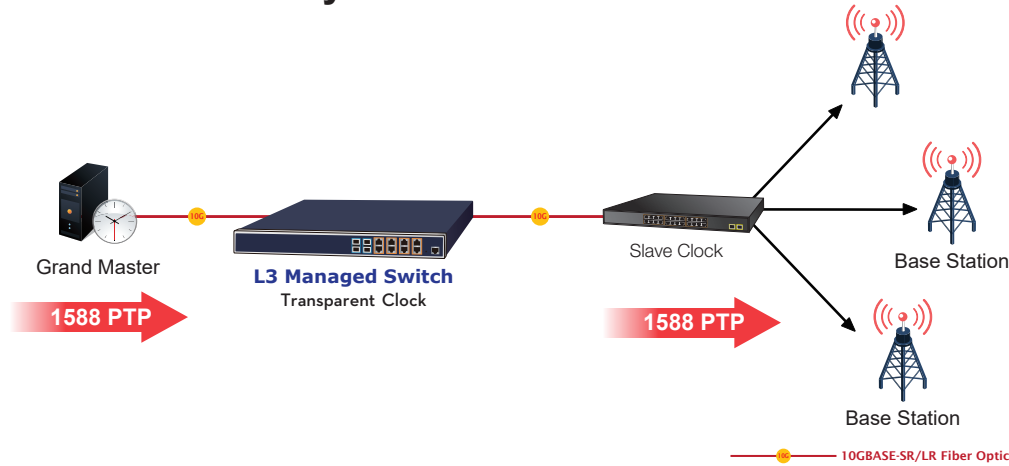
Enterprise Branch

XGS-6320-12X4TR

Headquarters

ERPS Ring for Metropolitan
Area Network Application
Recovery Time < 10ms

Core Chassis Switch

XGS-6320-8UP4X

Enterprise Branch

XGS-6320-8X8TR

Enterprise Branch

10GBASE-SR/LR Fiber Optic

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
- SNMP Management
  – Four RMON groups (history, statistics, alarms and events)
  – SNMP trap for interface Linkup 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 Functions:
  – DHCP Relay
  – DHCP Option82
  – DHCP Server
- User Privilege levels control
- NTP (Network Time Protocol)
- Network Diagnostic
  – ICMPv6/ICMPv4 Remote Ping
  – SFP-DDM (Digital Diagnostic Monitor)
- SMTP, Syslog and SNMP trap remote alarm
- System Log
- PLANET Smart Discovery Utility for deployment management
- PLANET UNI-NMS (Universal Network Management) and CloudViewerPro app for deployment management

1588 Time Protocol for Industrial Computing Networks

The XGS-6320-8UP4X is ideal for implementing Precision Time Protocol (PTP) applications as a transparent clock. It can play an important role in an IEEE 1588 and Synchronous Ethernet network by supporting **MEF service** delivery and timing over packet solutions.

Time Synchronization in Network

Grand Master

L3 Managed Switch
Transparent Clock

Slave Clock

Base Station

Base Station

1588 PTP

1588 PTP

10GBASE-SR/LR Fiber Optic

Layer 3 Routing Support

The XGS-6320 series enables the administrator to conveniently boost network efficiency by configuring Layer 3 IPv4/IPv6 VLAN static routing manually, the **RIP** (Routing Information Protocol) or **OSPF** (Open Shortest Path First) settings automatically.

The RIP can employ the hop count as a routing metric and prevent routing loops by implementing a limit on the number of hops allowed in a path from the source to a destination.

The OSPF is an interior dynamic routing protocol for autonomous system based on link state. The protocol creates a database for link state by exchanging link states among Layer 3 switches, and then uses the Shortest Path First algorithm to generate a route table based on that database.

Robust Layer 2 Features

The XGS-6320 series can be programmed for advanced switch management function, 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**. It allows the operation of a high-speed trunk combining multiple ports. Supporting 8 trunk groups, it enables a maximum of up to 16 ports per trunk and supports connection fail-over as well.

MSTP

QoS

Q-in-Q

LACP

LLDP

IGMP

MLD

L2/L4
Managed Switch

L2/L4
Managed Switch
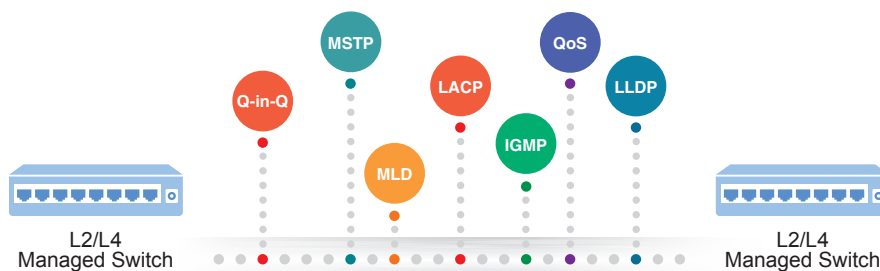
Cybersecurity Network Solution to Minimize Security Risks

The XGS-6320-8UP4X supports SSHv2 and TLSv1.2 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, and MAC-based network access control, RADIUS and TACACS+ user accounts management, SNMPv3 authentication, and more to provide a comprehensive security solution.

All Security Solutions for Building Your Solid Network Infrastructure

Cybersecurity

Strengthen
SSH/TLS
encryption

Remote Management Solution

PLANET's Universal **Network Management System** (UNI-NMS) and CloudViewerPro 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 CloudViewerPro app, all kinds of businesses can now be speedily and efficiently managed from one platform.

NMS Controller

CloudViewerPro App

Intelligent SFP Diagnosis Mechanism

The XGS-6320 series 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.

*SFP DDM **(Digital Diagnostic Monitor)***

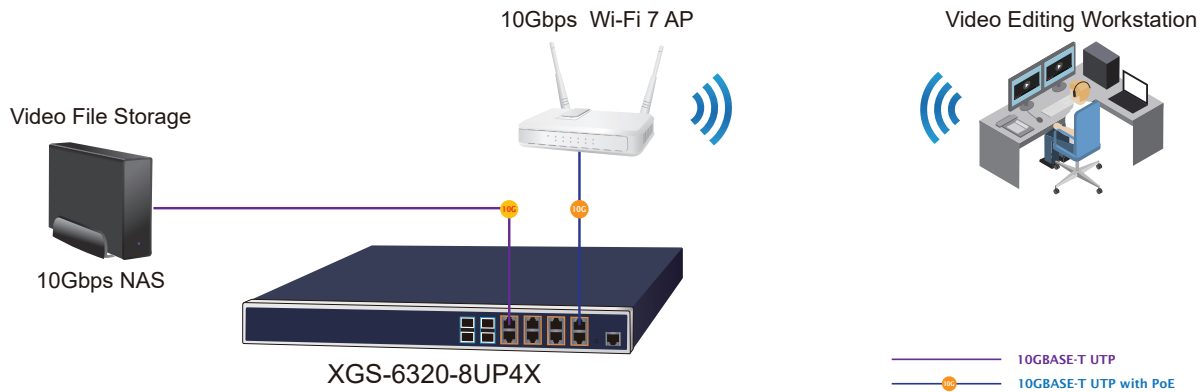| Voltage | Ammeter | Temperature | Power Transceiver | Power Receiver |
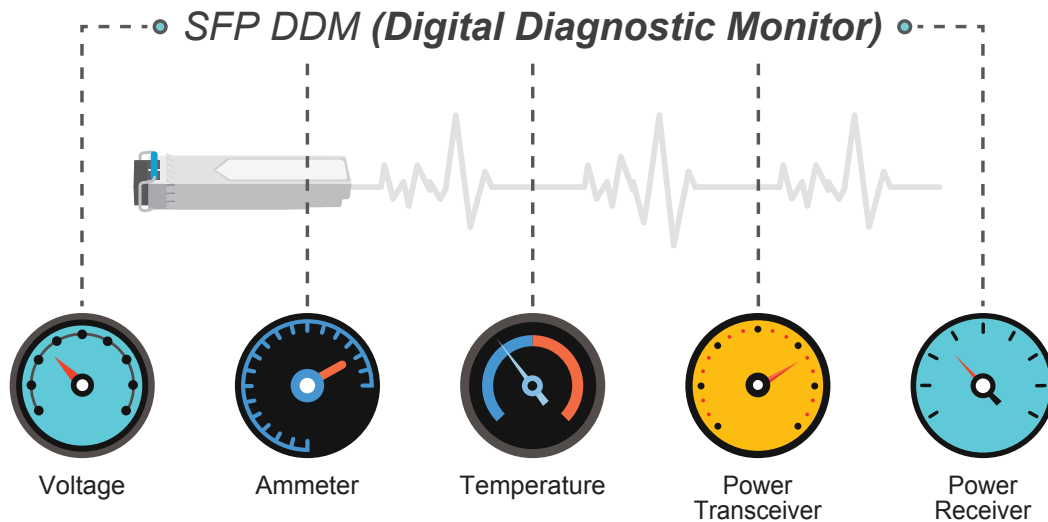
SMTP/SNMP Trap Event Alert

Though most NVR or camera management software offers SMTP email alert function, the XGS-6320 series further provides event alert function to help to diagnose the abnormal device owing to whether or not there is a break of the network connection.

Applications

The Ultimate 10G Network

Upgrade effortlessly with our 10G PoE++ Switch – a perfect match for upcoming WiFi 7 Access Points. Seamlessly integrate with advanced wireless technology, enjoy efficient 10Gbps connectivity, and meet increasing power demands effortlessly.

10Gbps Wi-Fi 7 AP

Video Editing Workstation

Video File Storage

10Gbps NAS

XGS-6320-8UP4X

10GBASE-T UTP
10GBASE-T UTP with PoE

Layer 3 VLAN Routing Application

With the built-in robust IPv4/IPv6 Layer 3 traffic routing protocols, the XGS-6320 series ensures reliable routing between VLANs and network segments. The routing protocols can be applied by VLAN interface with up to 3K routing entries. The XGS-6320 series is certainly a cost-effective and ideal solution for enterprises.

VLAN Routing + 10G Uplink Applications

17Fl.: Finance Department
VLAN100 Domain B 192.168.10.x/24

20Fl.: Sales Department
VLAN300 Domain A 192.168.30.x/24

550m

Control Center
VLAN1 Domain 192.168.0.x

450m

10Fl.: MKT Department
VLAN1 Domain 192.168.20.x/24

200m

XGS-6320-8UP4X

10km

Branch Office

10GBASE-SR/LR Fiber Optic
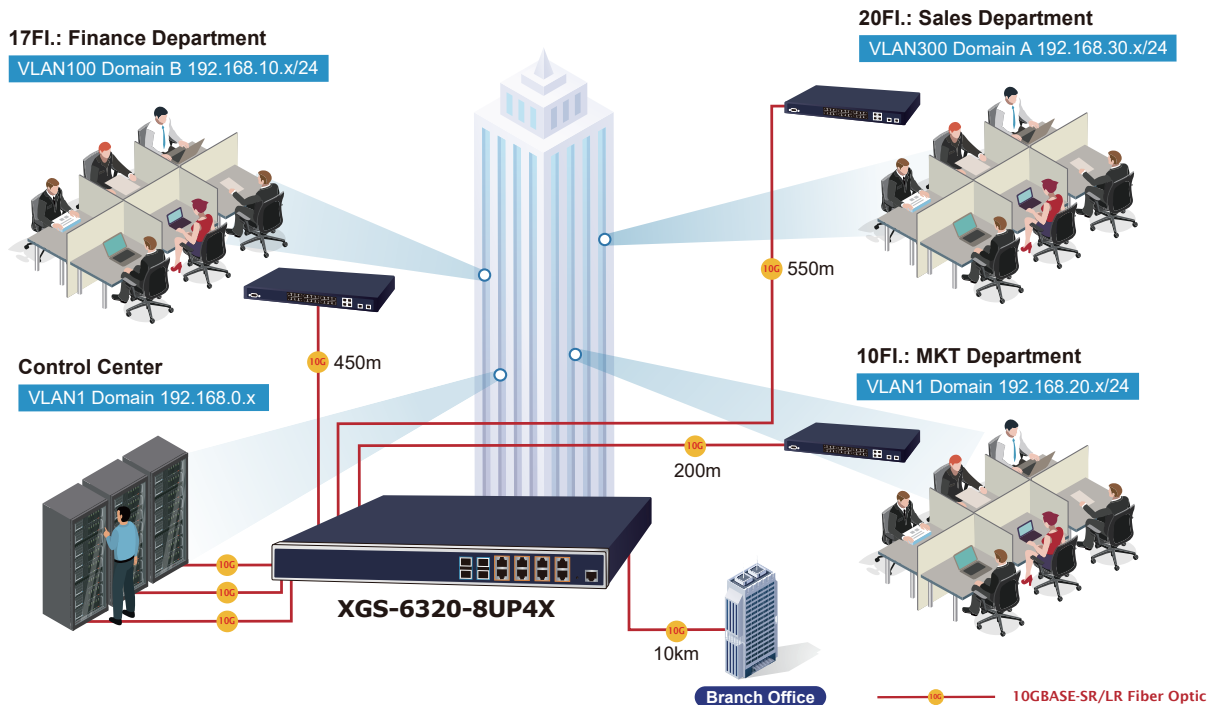
Specifications

Product	XGS-6320-8UP4X
Hardware Specifications	
Copper Ports	8 10GBASE-T RJ45 auto negotiation ports (Ports 5 to 12) Backward compatible with 10G/5G/2.5G/1G/100Mbps data rate
SFP+ Slots	4 10GBASE-SR/LR SFP+ ports (Ports 1 to 4) Backward compatible with 1000BASE-SX/LX/BX and 2500BASE-X SFP transceivers
PoE Injector Port	8 ports with 802.3bt PoE++ injector function from Ports 5 to 12
Console	1 x RJ45-to-DB9, RS232 serial port (115200, 8, N, 1)
Reset Button	< 5 sec: System reboot > 5 sec: Factory default
RAM	2,048Mbytes
Flash Memory	128Mbytes
Dimensions (W x D x H)	440 x 300 x 44mm, 1U height
Weight	4,285g
Power Requirements	100~240V AC, 50/60Hz, 5A max.
Power Consumption	AC 110V: 34.5W / 117.7BTU (No loading) ; 502W / 1712.9BTU (Full loading) AC 220V: 33.4W / 114BTU (No loading) ; 488W / 1665.1BTU (Full loading)
ESD Protection	6KV DC
Surge Protection	4KV DC
Fan	3 smart fans
LED	System: PWR (Green), SYS (Green), Ring (Green), Ring Owner (Green) 10GBASE-T RJ45 ports: 100/1000 LNK/ACT (Green) 2.5G/5G/10G LNK/ACT (Amber) 802.3bt PoE-in-Use (Green) 802.3at PoE-in-Use (Amber) 10GBASE-X SFP+ ports: 1000 LNK/ACT (Green) 2.5G/10G LNK/ACT (Amber)
Switching Specifications	
Switch Architecture	Store-and-Forward
Switch Fabric	240Gbps/non-blocking
Throughput	178.57 @ 64Bytes packet
Address Table	32K entries, automatic source address learning and aging
Shared Data Buffer	32Mbits
Flow Control	IEEE 802.3x pause frame for full duplex Back pressure for half duplex
Jumbo Frame	10Kbytes
Power Over Ethernet	
PoE Standard	IEEE 802.3bt PoE++ Type-4 PSE Backward compatible with 802.3at PoE+ PSE
PoE Power Supply Type	802.3bt End-span Mid-span Force
PoE Power Output	Per port 54V DC - 802.3bt Type-4 mode: maximum 95 watts - End-span mode: maximum 36 watts - Mid-span mode: maximum 36 watts - Force mode: maximum 95 watts
Power Pin Assignment	802.3bt: 1/2(-), 3/6(+),4/5(+), 7/8(-) End-span: 1/2(-), 3/6(+) Mid-span: 4/5(+), 7/8(-)
PoE Power Budget	420W maximum
Max. Number of Type 2 PDs	8
Max. Number of Type 3 PDs	7
Max. Number of Type 4 PDs	4
PoE Management Functions	
Active PoE Device Detection	Yes
PoE Power Recycling	Yes, daily or predefined schedule
PoE Schedule	4 schedule profiles

PoE Extend Mode	Yes, max. 160 meters
PoE System Management	System PoE Admin control
	Total PoE power budget control
	Auto power input and PoE budget control
	PoE Legacy mode
	Over-temperature threshold alarm
	PoE usage threshold alarm
PoE Port Management	Port Enable/Disable/Schedule
	PoE mode control
	- 802.3bt
	- 802.3at End-span
	- 802.3at Mid-span
	- Force mode
	Port Priority
Layer 3 Functions	
IP Interfaces	Max. 128 VLAN interfaces
Routing Table	Max. 512 static route entries
	Max. 3072 routing table entries
Routing Protocols	IPv4 RIPv2
	IPv4 OSPFv2
	IPv6 OSPFv3
	IPv4 hardware static routing
	IPv6 hardware static routing
Layer 2 Functions	
Port Configuration	Port disable/enable
	Flow Control disable/enable
	Port link capability control
Port Status	Display each port's speed duplex mode, link status, flow control status, auto negotiation status, trunk status
Port Mirroring	TX/RX/Both
	Many-to-1 monitor
	RMirror – Remote Switched Port Analyzer (Cisco RSPAN)
	Supports up to 5 sessions
VLAN	IEEE 802.1Q tag-based VLAN,
	IEEE 802.1ad Q-in-Q tunneling
	Private VLAN Edge (PVE)
	MAC-based VLAN
	Protocol-based VLAN
	Voice VLAN
	MVR (Multicast VLAN Registration)
	GVRP
	Up to 4K VLAN groups, out of 4094 VLAN IDs
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)
	Supports 7 MSTP instances
	BPDU Guard, BPDU filtering and BPDU transparent
	Root Guard
Link Aggregation	IEEE 802.3ad LACP (static trunk)
	Supports 6 trunk groups with 12 ports per trunk
IGMP Snooping	IPv4 IGMP (v1/v2/v3) snooping
	IPv4 IGMP querier mode support
	Supports 255 IGMP groups
MLD Snooping	IPv6 MLD (v1/v2) snooping,
	IPv6 MLD querier mode support
	Supports 255 MLD groups
Bandwidth Control	Per port bandwidth control
	Ingress: 10Kbps~13128Mbps
	Egress: 10Kbps~13128Mbps
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

Synchronization	IEEE 1588v2 PTP(Precision Time Protocol) - Peer-to-peer transparent clock - End-to-end transparent clock
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
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 Functions	
Basic Management Interfaces	Console;Telnet; Web browser; SNMP v1, v2c
Secure Management Interfaces	SSHv2, TLSv1.2, SNMPv3
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 CloudViewerPro app
Event Management	Remote Syslog System log SMTP
SNMP MIBs	RFC1213 MIB-II RFC 2863 IF-MIB RFC1643 Ethernet MIB RFC2863 Interface MIB RFC2665 Ether-Like MIB RFC2737 Entity MIB RFC2819 RMON MIB (Groups 1, 2, 3 and 9) RFC2618 RADIUS Client MIB RFC3411SNMP-Frameworks-MIB IEEE802.1X PAE LLDP MAU-MIB Power over Ethernet MIB
Standards Conformance	
Regulatory Compliance	FCC Part 15 Class A, CE

Standards Compliance	IEEE802.3u 100BASE-TX
	IEEE802.3z 1000BASE-SX/LX
	IEEE 802.3ab 1000BASE-T
	IEEE 802.3bz 2.5GBASE-T
	IEEE 802.3ae 10Gb/s Ethernet
	IEEE802.3x flow control and back pressure
	IEEE802.3ad port trunk with LACP
	IEEE802.1D Spanning Tree Protocol
	IEEE802.1w Rapid Spanning Tree Protocol
	IEEE 802.1s Multiple Spanning Tree Protocol
	IEEE802.1p Class of Service
	IEEE802.1Q VLAN tagging
	IEEE 802.1ad Q-in-Q VLAN stacking
	IEEE 802.1x Port Authentication Network Control
	IEEE 802.1ab LLDP
	IEEE 802.3af Power over Ethernet
	IEEE 802.3at Power over Ethernet Plus
	IEEE 802.3bt Power over Ethernet Plus Plus
	IEEE 802.3ah OAM
	IEEE 802.1ag Connectivity Fault Management (CFM)
	IEEE 802.3az Energy Efficient Ethernet (EEE)
	IEEE 1588 PTPv2
	RFC 768 UDP
	RFC 783 TFTP
	RFC 791 IP
	RFC 792 ICMP
	RFC 2068 HTTP
	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 5340 OSPF v3
	RFC 2453 RIP v2

Environments	
Operating	Temperature: 0 ~ 50 degrees C
	Relative Humidity: 5 ~ 95% (non-condensing)
Storage	Temperature: -20 ~ 70 degrees C
	Relative Humidity: 5 ~ 95% (non-condensing)

Ordering Information

XGS-6320-8UP4X	Layer 3 8-Port 10GBASE-T 95W 802.3bt PoE + 4-Port 10GBASE-X SFP+ Managed Ethernet Switch

Related Products

XGS-6320-8X8TR	Layer 3 8-Port 10GBASE-X SFP+ + 8-Port 10GBASE-T Managed Ethernet Switch with 48V DC Redundant Power
XGS-6320-12X4TR	Layer 3 12-Port 10GBASE-X SFP+ + 4-Port 10GBASE-T Managed Ethernet Switch with 48V DC Redundant Power

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

XGS-6320-8UP4X