Layer 3 Multi-Port 10 Gigabit Managed Ethernet Switch
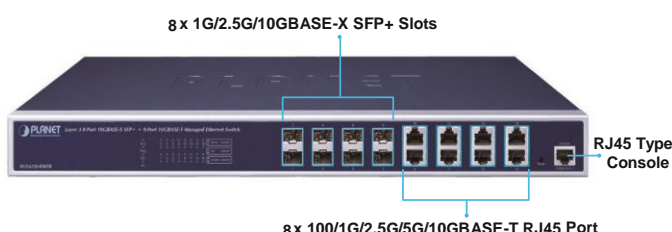
Perfect Managed All-port 10Gbps Switch with L3/L2 Switching and Security

PLANET XGS-6320 series is a **fully-managed all-port 10Gbps Ethernet switch** designed for the demand of high-bandwidth required network equipment, such as Wi-Fi 6/6E wireless AP, NAS, workstation and those with 10Gbps fiber or copper interfaces. It features **multiple 10GBASE-T copper** ports and 1 **0GBASE-X SFP+ fiber** ports are flexibly designed to extend the connection distance.

Models	10GBASE-X SFP+ Port	10GBASE-T RJ45 Port	Power Input - AC	Power Input -DC
XGS-6320-8X8TR	8	8	100-240 V AC	36-60 V DC
XGS-6320-12X4TR	12	4		

With such a favorable data link capability, hardware-based Layer 3 routing performance, Layer 2 and Layer 4 switching engine and user-friendly yet advanced IPv6/IPv4 management interfaces, it helps to accelerate the deployment of the next-generation high-bandwidth required network for Metro, smart cites and enterprises.

Mega 160 Gbps Gigabit Solution for Uplink & Long-reach Networking

SSHv2/TLSv1.2 · SNMPv3 · Cyber Security · G.8032 ERPS Ring · NMS Supported

PLANET CloudViewer Supported

12 x 10 Gbps SFP+   4 x 10 Gbps Copper

8 x 1G/2.5G/10GBASE-X SFP+ Slots

RJ45 Type Console

8 x 100/1G/2.5G/5G/10GBASE-T RJ45 Port

Physical Port

- **XGS-6320-8X8TR**
  - **Eight 10GBASE-X SFP+** ports, backward compatible with 1000BASE-X and 2500BASE-X SFP transceivers
  - **Eight 10GBASE-T RJ45** ports, backward compatible with 100/1G/2.5G/5GBASE-T auto-negotiation
- **XGS-6320-12X4TR**
  - **Twelve 10GBASE-X SFP+** ports, backward compatible with 1000BASE-X and 2500BASE-X SFP transceivers
  - **Four 10GBASE-T RJ45** ports, backward compatible with 100/1G/2.5G/5GBASE-T auto-negotiation
- RJ45 type RS232 console interface for switch basic management

Redundant Power System

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

Layer 3 IP Routing Features

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

Layer2 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

12 x 1G/2.5G/10GBASE-X SFP+ Slots

RJ45 Type Console
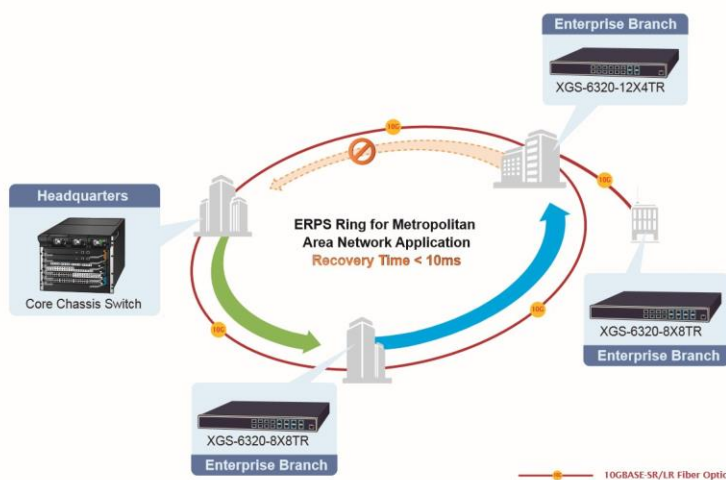
4 x 100/1G/2.5G/5G/10GBASE-T RJ45 Port
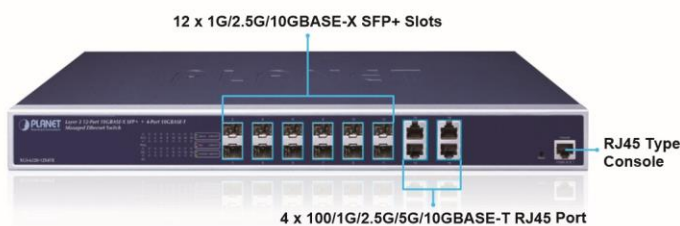
10GBASE-T and 10GBASE-X SFP Dual Media Interfaces for Diversified Bandwidth Applications

PLANET XGS-6320 series 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 4 speeds, 10GBASE-SR/LR, 2500BASE-X, 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 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.

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

Headquarters
Core Chassis Switch

Enterprise Branch
XGS-6320-12X4TR

XGS-6320-8X8TR
Enterprise Branch

XGS-6320-8X8TR
Enterprise Branch

10GBASE-SR/LR Fiber Optic

- – 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 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 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

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.
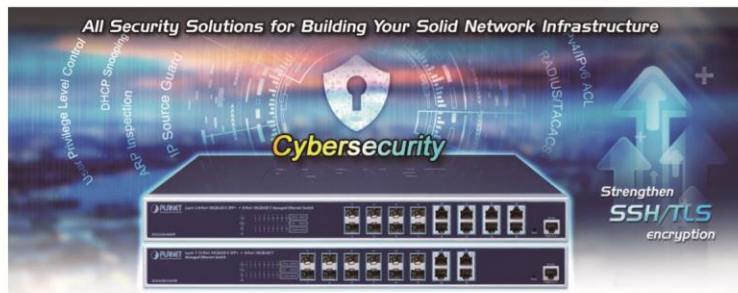

AC and DC Redundant Power to Ensure Continuous Operation

The XGS-6320 series is equipped with one 100~240V AC power supply unit and one additional 36-60V DC power supply unit for redundant power supply. A redundant power system is also provided to enhance the reliability with either AC or DC power supply unit. The redundant power system is specifically designed to handle the demands of high-tech facilities requiring the highest power integrity.

Solution for IPv6 Networking

With the support for IPv6/IPv4 protocol, and easy and user-friendly management interfaces, the XGS-6320 series is the best choice for IP surveillance, VoIP and wireless service providers to connect with the IPv6 network. It also helps SMBs to step in the IPv6 era with the lowest investment and without having to replace the network facilities even though ISPs establish the IPv6 edge network.
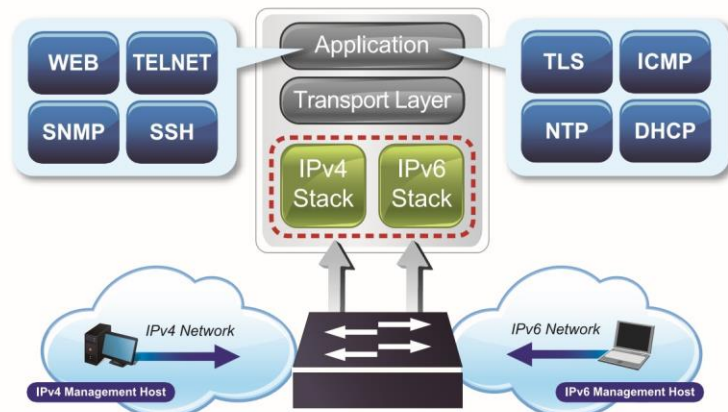
- – TACACS+ login users access authentication
- – RADIUS/TACACS+ users access authentication
- – Guest VLAN assigns clients to a restricted VLAN with limited services
- Access Control List
  - – IP-based Access Control List (ACL)
  - – MAC-based Access Control List
- Source MAC/IP address binding
- **DHCP 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

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 Linkdown 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
  - – Cable Diagnostic technology provides the mechanism to detect and report potential cabling issues
  - – SFP-DDM (Digital Diagnostic Monitor)
- SMTP, Syslog and SNMP trap remote alarm
- System Log