L3 4-Port 10/100/1000T + 4-Port 2.5G + 2-Port 10G SFP+ Managed Switch Series

Perfect Managed Multigigabit EthernetSwitch with L3/L2 Switching and Security

PLANET MGS-6320-Series is a brand-new **Layer 3 managed multigigabit switch** providing **2.5Gbps** data over UTP cables, designed for the demand of high-bandwidth required network equipment, such as Wi-Fi 6 802.11ax wireless AP, NAS, workstation and those with 2.5GBASE-T interfaces. It features **4 10/100/1000BASE-T** copper ports, **4 100/1000/2500BASE-T** copper ports and **2 extra 1G/2.5G/10GBASE-X SFP+ fiber ports** that are flexibly designed to extend the connection distance. 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 IoT and wireless network for enterprises and smart cities.

2.5Gbps Capability for Diversified Bandwidth Applications

With the terminal access rates of 802.11ac/ax wireless APs reaching as high as 1.2Gbps to 2.6Gbps, Gigabit ports have been unable to satisfy the demand. Supporting both 1Gbps and 2.5Gbps capability and 802.3af/at and 802.3bt PoE output, the MGS-6320-8HP2X can deliver not only data to 802.11ac/ax wireless APs, but also power with the existing CAT5e Ethernet cables to other powered devices such as APs and IP cameras. It can definitely give you the speed you demand and its Plug and Play makes installation easy

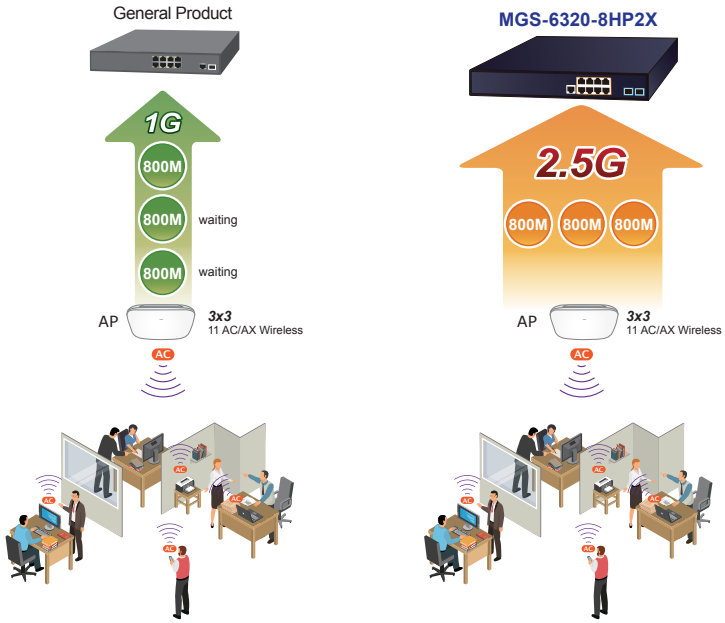
Physical Port

- **4-Port 10/100/1000BASE-T** Gigabit Ethernet RJ45 (Port 1 to port 4)
- **4-Port 10/100/1000/2500BASE-T** Gigabit Ethernet RJ45 (Port 5 to port 8)
- 4-Port 10/100/1000BASE-T with **36W** 802.3at PoE+ injector function (MGS-6320-8HP2X Port-1 to Port-4)
- 4-Port 10/100/1000/**2500BASE-T with 90W 802.3bt PoE++** injector function (MGS-6320-8HP2X Port-5 to Port-8)
- 2-port 10GBASE-X SFP+, backward compatible with 1000BASE-X and 2500BASE-X SFP transceivers
- RJ45 type RS232 console interface for switch basic management

Power over Ethernet(MGS-6320-8HP2X)

- 4 PoE ports with 802.3at PoE+ inject built-in (Port-1 to Port-4)
- 4 PoE ports with 802.3bt PoE++ inject built-in (Port-5 to Port-8)
- Provides up to 95W to 802.3bt/PoH powered devices
- Maximum 240-watt PoE budget
- Auto detects powered device(PD)
- Remote power feeding up to 100M
- PoE Isolation
- Circuit protection prevents power interference between ports
- 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
- Intelligent PoE features
  - Temperature threshold control
  - PoE usage threshold control
  - PD alive check
  - PoE schedule

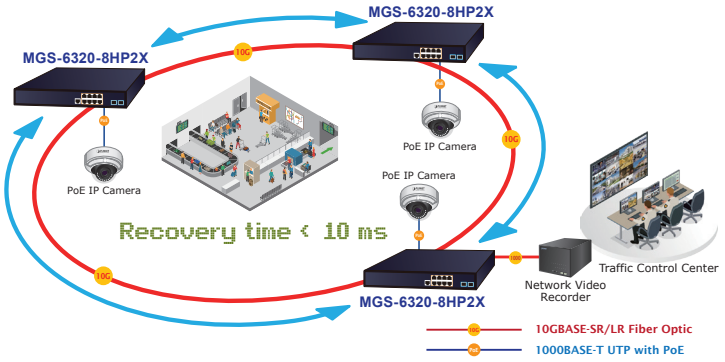
New Generation of Multigigabit Switch



Redundant Ring, Fast Recovery for Critical Network Applications

The MGS-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 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.

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
- 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 4 trunk groups, up to 10 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)

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 MGS-6320-Seriessupports **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. TheMGS-6320-Series provides broad bandwidth and powerful processing capacity.

Outstanding 802.3bt PoE++ Solution

Complying with the IEEE 802.3at PoE+ and 802.3bt PoE++ technology, the MGS-6320-8HP2X features four 10/100/1000BASE-T 802.3at PoE+ ports, and four 10/100/1000/2.5GASE-T 802.3bt PoE++ ports with each port powering up to **95 watts** and a total PoE budget of up to 240 watts. It supports rich PoE operation modes including **90-watt 802.3bt type-4 PoE++ ports**, **95-watt PoH** (Power over HD-BASE-T) mode and 4-pair **force mode** to solve the incompatibility of non-standard 4-pair PoE PDs in the field.

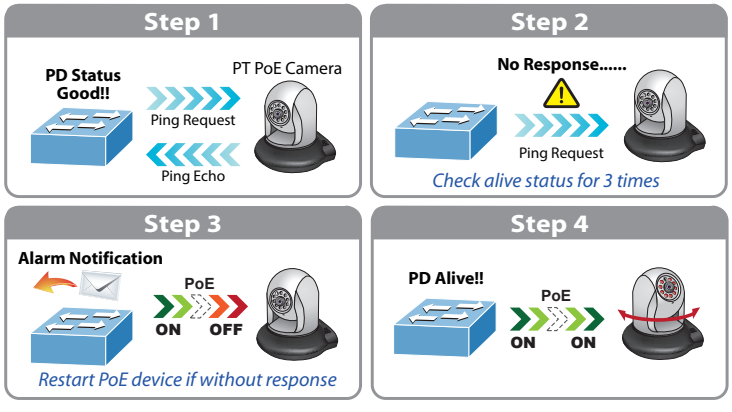
Built-in Unique PoE Functions for Surveillance Management

As a managed PoE Switch for various networks, the MGS-6320-8HP2X 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 MGS-6320-8HP2X can be configured to monitor a connected PD status in real time via ping action. Once the PD stops working and responding, the MGS-6320-8HP2X 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.



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
  - 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 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