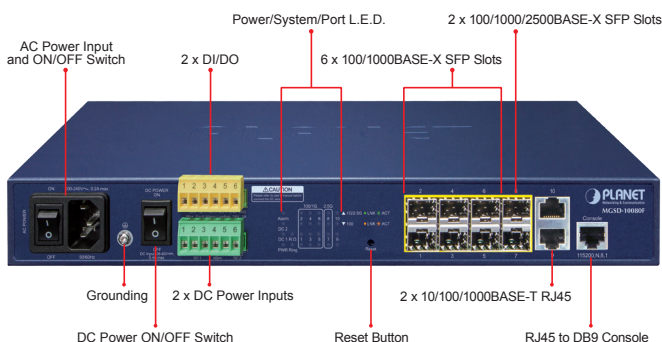


6-Port 100/1000X SFP + 2-Port 1G/2.5G SFP + 2-Port 10/100/1000T Managed Metro Ethernet Switch



Multiple SFP Fiber Port Switch for Growing Long-Reach Networking of Enterprises, Telecoms and Campuses

PLANET MGSD-10080F Managed Metro Ethernet Switch is equipped with advanced management functions and provides **6 100/1000Mbps dual speed SFP Fiber ports**, **2 100/1000/2500Mbps SFP ports** and **2 10/100/1000Mbps TP ports** delivered in a rugged strong case. It is capable of providing non-blocking switch fabric and wire-speed throughput as high as **26Gbps** in the temperature range from -10 to 60 degrees C without any packet loss and CRC error, which greatly simplify the tasks of upgrading the enterprise LAN for catering to increasing bandwidth demands. The MGSD-10080F is specially designed for service providers to deliver profitable long-distance Ethernet network. The MGSD-10080F adopts “**Front Access**” design, making the wiring and maintenance of the MGSD-10080F placed in a cabinet very easy for technicians.



Cybersecurity Network Solution to Minimize Security Risks

The MGSD-10080F supports SSHv2 and TLS 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** network access control, **RADIUS** and **TACACS+** user accounts management, **SNMPv3** authentication, and so on to complement it as an all-security solution.

Physical Port

- 6 100/1000BASE-X SFP mini-GBIC slots (Port 1 to port 6)
- **2 100/1000/2500BASE-X** mini-GBIC/SFP slots for SFP type auto detection (Port 7 to port 8)
- 2-Port 10/100/1000BASE-T Gigabit Ethernet RJ45 (Port 9 to port 10)
- One RJ45 console interface for basic management and setup

Redundant Power System

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

Digital Input / Digital Output

- 2 Digital Input (DI)
- 2 Digital Output (DO)
- Integrates sensors into auto alarm system
- Transfer alarm to IP network via SNMP trap

Industrial Protocol

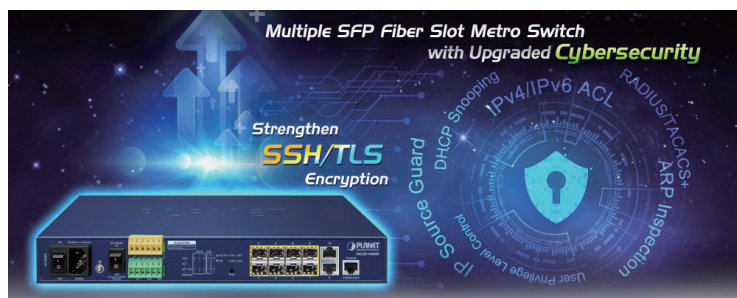
- IEEE 1588v2 PTP (Precision Time Protocol) Transparent Clock mode

Hardware Design

- -10 to 60 degrees C operating temperature for DC power input only
- 13-inch desktop size, 19-inch Rack-mountable
- Relay alarm for port breakdown, power failure
- Fanless design

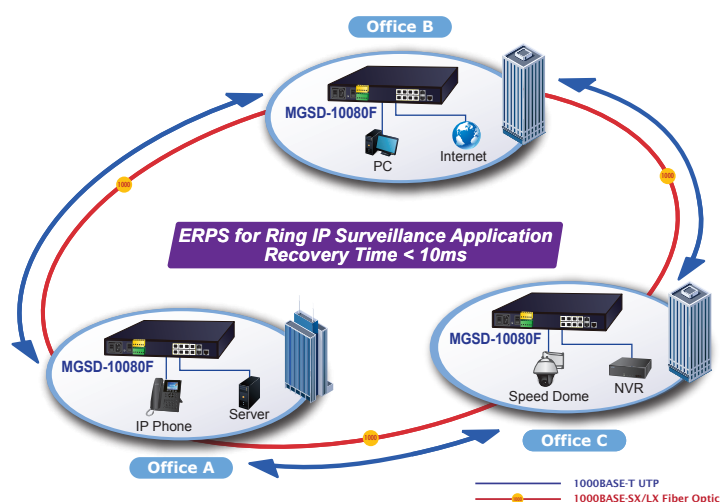
Layer 2 Features

- Prevents packet loss with back pressure (half-duplex) and IEEE 802.3x pause frame flow control (full-duplex)
- High performance of Store-and-Forward architecture and runt/CRC filtering eliminate erroneous packets to optimize the network bandwidth
- Storm Control support
 - Broadcast / Multicast / Unicast
- Supports **VLAN**
 - IEEE 802.1Q tagged VLAN



Redundant Ring, Fast Recovery for Critical Network Applications

The MGSD-10080F 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, Spanning Tree Protocol (802.1s MSTP) into customer's network to enhance system reliability and uptime in various environments.



AC and DC Redundant Power to Ensure Continuous Operation

To enhance the operation reliability and flexibility, the MGSD-10080F is equipped with one **100 ~ 240V AC** power supply unit and two additional **36 ~ 60V DC** power input connectors for redundant power supply installation. The Redundant Power Systems are specifically designed to handle the demands of high tech facilities requiring the highest power integrity. Furthermore, with the **36~ 60V DC** power supply implemented, the MGSD-10080F can be applied as the telecom level device that could be located in the electronic room.

Digital Input and Digital Output for External Alarm

The MGSD-10080F supports Digital Input, and Digital Output on the front panel. The external alarm offers technicians the ability to use **Digital Input** to detect, and log external device status (such as door intrusion detector) for the alarm as **Digital Output** could be used to alarm if the MGSD-10080F has port link down, link up or power failure.

- Up to 4K VLANs groups, out of 4094 VLAN IDs
- Supports provider bridging (VLAN Q-in-Q, IEEE 802.1ad)
- Private VLAN Edge (PVE)
- Port Isolation
- MAC-based VLAN
- IP Subnet-based VLAN
- Protocol-based VLAN
- VLAN Translation
- Voice VLAN
- GVRP

• Supports **Spanning Tree Protocol**

- STP, IEEE 802.1D Spanning Tree Protocol
- RSTP, IEEE 802.1w Rapid Spanning Tree Protocol
- MSTP, IEEE 802.1s Multiple Spanning Tree Protocol, spanning tree by VLAN
- BPDU Filtering/BPDU Guard

• Supports **Link Aggregation**

- 802.3ad Link Aggregation Control Protocol (LACP)
- Cisco ether-channel (Static Trunk)
- Maximum 5 trunk groups, up to 8 ports per trunk group
- Up to 16Gbps bandwidth (Duplex Mode)

• Provides port mirror (1-to-1)

- Port mirroring to monitor the incoming or outgoing traffic on a particular port

• Loop protection to avoid broadcast loops

• Supports 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) and LLDP-MED

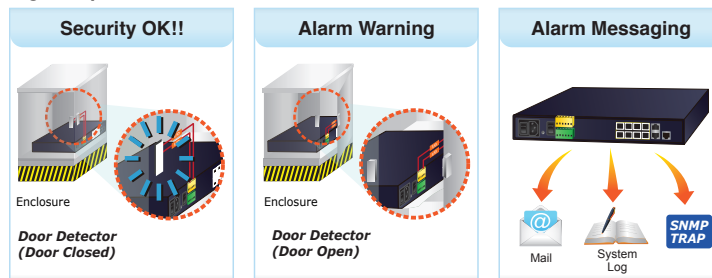
Layer 3 IP Routing Features

- Supports maximum 32 static routes and route summarization

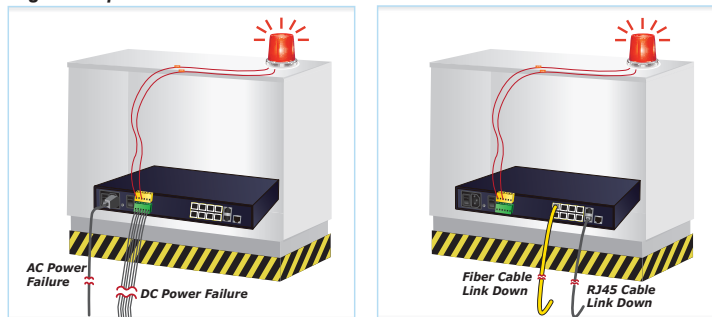
Quality of Service

- Ingress Shaper and Egress Rate Limit per port bandwidth control
- 8 priority queues on all switch ports
- Traffic classification
 - IEEE 802.1p CoS
 - IP TOS / DSCP / IP Precedence
 - IP TCP/UDP port number

Digital Input



Digital Output

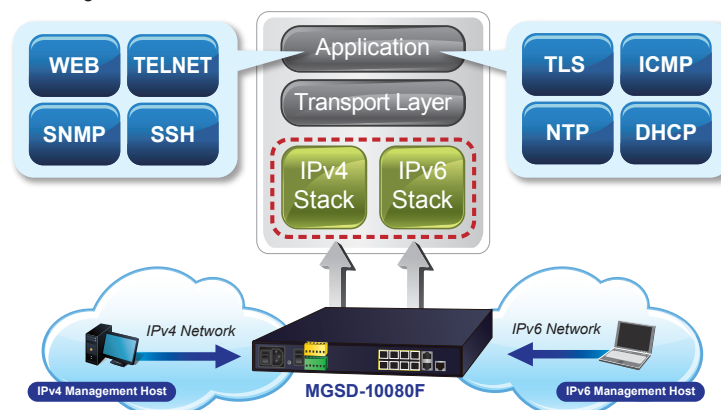


Environmentally-friendly, Fanless Design for Silent Operation

The MGSD-10080F with a desktop-sized metal housing is designed to operate quietly and effectively as it is fanless and comes with optimal power output capability. Thus, the MGSD-10080F can be deployed in any environment without affecting its performance.

Cost-effective IPv6 Managed Gigabit Switch Solution for Metro Ethernet

To fulfill the demand for ISP to build the IPv6 (Internet Protocol version 6) network infrastructure speedily, the MGSD-10080F supports both IPv4 and IPv6 management functions. It can work with original IPv4 network structure and also support the new IPv6 network structure. With easy and friendly management interfaces and plenty of management functions included, the MGSD-10080F Metro Ethernet Switch is the best choice for ISP and service providers to build the IPv6 FTTx edge service and for Industries to connect with IPv6 network.



- 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

Multicast

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

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

Management

- IPv4 and IPv6 dual stack management
- Switch Management Interfaces
 - Web switch management
 - Console/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