

PGS-16C04PFM



FEATURE

◆ 全 Gigabit 接入，Gigabit SFP UpLink

- 支援非阻塞式轉發，讓傳輸更流暢。
- 支援 IEEE 802.3x 全雙工流量控制和 BackPressure 半雙工流量控制。
- 支援 Gigabit 網路埠和 Gigabit SFP 埠上行組合，方便用戶靈活組建網路，滿足各種場景的網路需求。

◆ 智慧 PoE 供電

- 符合 IEEE 802.3 af/at PoE 供電標準，自動偵測 PoE 電源設備。
- 16*10/100/1000Base-T RJ45 埠支援 PoE 供電，滿足供電需求安防監控、電話會議系統、無線覆蓋等場景。
- PoE 埠支援優先權機制。當剩餘電量不足時，優先確保高優先級連接埠供電，避免設備過載。
- 支援 PoE 網管功能，可實現每個 PoE 的功率分配透過網路進行連接埠、優先權設定、連接埠電源狀態檢視、時間調度等管理配置。

◆ 高效率的處理能力

- 支援 IEEE 802.1Q VLAN 和協定 VLAN，使用者可依需求靈活劃分 VLAN 需要。
- 環網 STP/RSTP/MSTP 生成樹協議消除二層環路，實現鏈接備份。
- 支援 QoS，基於連接埠、基於 802.1P 和基於 DSCP 的三種優先權模式，四種優先權模式佇列調度演算法：Equ、SP、WRR、SP+WRR。
- 支援 ACL，透過配置匹配規則、處理操作等對資料包進行過濾時間權限提供靈活的安全存取控制策略。
- 支援 IGMP V1/V2 轉發協定和 IGMP Snooping，滿足轉發需求多終端高清視訊監控和視訊會議存取。
- 靜態聚合和動態聚合有效增加鏈路頻寬，實現負載平衡均衡、鏈路備份，提高鏈路可靠性。

❖ 安全性

- 支援連接埠隔離。
- 支援連接埠廣播風暴抑制。
- 支援 IP+MAC+連接埠+VLAN 四重彈性組合綁定功能。
- 支援 802.1X 認證，為區域網路計算機提供認證功能，根據認證結果控制受控連接埠的授權狀態。

❖ 穩定可靠

- CCC、CE、FCC、RoHS。
- 人性化面板可透過 PWR、PoE、和連結。
- 採用自主研發的電源，高冗餘設計，提供長期、穩定的供電，穩定的 PoE 電源輸出。
- 低功耗，附風扇，鍍鋅鋼金屬外殼，散熱優良保證交換器穩定運作。

❖ 便捷的維護管理

- CPU 監控、記憶體監控、Ping 偵測、網路線偵測。
- HTTPS、SSLV3、SSH V1/V2 等加密方式讓管理更安全。
- RMON、系統日誌、連接埠流量統計，方便網路最佳化與維護轉型。
- LLDP 方便網管系統查詢及判斷通訊狀況連結的狀態。
- Web 網管、CLI (Console、Telnet)、SNMP (V1/V2/V3)、Telnet 等多樣化的管理和維護方式。

TECHNICAL SPECIFICATION

Interface Characteristics

Fixed Port	1*Console RS232 port (115200,N,8,1) 4*100/1000Base-X uplink SFP ports (Data) 16*10/100/1000Base-T PoE ports(Data/Power)
Ethernet Port	Port 1-16 can support 10/100/1000Base-T(X) auto-sensing, full/half duplex MDI/MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP(≤100 meters) 100BASE-TX: Cat5 or later UTP(≤100 meters) 1000BASE-T: Cat5e or later UTP(≤100 meters)
SFP Slot Port	Gigabit SFP optical fiber interface, default no include optical modules (optional single-mode/multi-mode, single fiber/ dual fiber optical module.LC)
Optical Cable / Distance	Multi-mode: 850nm/0~550M Single-mode: 1310nm /0~40KM, 1550nm /0~120KM.

Chip Parameter

Network Management Type	L2+
Network Protocol	IEEE802.3 10BASE-T, IEEE802.3i 10Base-T, IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T, IEEE802.3z 1000Base-X, IEEE802.3x
Forwarding Mode	Store and Forward(Full Wire Speed)
Switching Capacity	56Gbps
Forwarding Rate@64byte	29.76Mpps
MAC	8K
Buffer Memory	4.1M
Jumbo Frame	10K
CPU(Hz)	500M
DRAM	1G
Flash	256M
LED Indicator	Power: PWR (Yellow), System: SYS (Yellow) Network: Link (Yellow), POE: PoE (Green), Fiber port: L/A (Green)
ResetSwitch	Yes, One-button factory reset

PoE & Power Supply

PoE Port	Port 1 to 16
PoE Management	Port PoE output priority configuration PoE power supply total power limit configuration PoE work and time scheduling, Port PoE working status display Port PoE output power distribution, PoE on/off, af/at power distribution
Power Supply Pin	1/2(+) 3/6(-)
Max Power Per Port	30W, IEEE802.3 af/at
Total PWR/ Input Voltage	250W/ (AC100-240V)
Power Consumption	Standby<16W, Full load<240W
Power Supply	Built-in power supply, AC100~240V ,50-60Hz, 4.1A

Physical Parameter

Operation TEMP / Humidity	-20~+55°C, 5%~90% RH Non condensing
Storage TEMP / Humidity	-40~+75°C, 5%~95% RH Non condensing
Dimension(L*W*H)	440*290*44.5mm
Net /Gross Weight	<4.0kg / <4.5kg
Installation	Desktop, 19-inch 1U cabinet

Certification & Warranty

Lightning protection	Lightning protection: 4KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3years, lifelong maintenance.

Network Management Features

Interface	IEEE802.3X (Full-duplex) Broadcast storm control based on port speed Port real-time traffic management (Flow Interval) Limit the rate of packet traffic on incoming and outgoing ports, with mini granularity is 16Kbps and max is 1Gbps
Layer 3 Features	IPv4 static route/default route, max entries 128 L2+ network management function, ARP protocol, max 1024 entries

Network Management Features

VLAN	Port-based VLAN (4K), VLAN based on the protocol IEEE802.1q, Port configuration of Access, Trunk, Hybri
Port Aggregation	LACP dynamic aggregation, static aggregation Max 10 aggregation groups and 8 ports per group
Spanning Tree	STP (IEEE802.1d), RSTP (IEEE802.1w), MSTP (IEEE802.1s)
Multicast	Multicast VLAN, User quick exit mechanism IGMP Snooping v1/v2, Max 1024 multicast groups
Port Mirroring	Bidirectional data mirroring based on port
QoS	Queue scheduling algorithm (SP, WRR, SP+WRR) Flow-based rate limiting, Flow-based packet filtering Flow-based based redirection, 8*Output queues of each port 802.1p/ DSCP priority mapping, Diff-Serv QoS, Priority Mark/Remark
ACL	Port-based and VLAN-delivered ACL The L2-L4 packet filtering function can match the first 80 bytes of the packet and provide information based on source MAC address, Destination MAC address, source IP address, destination IP address, IP proto- col type, TCP/UDP port, TCP/UDP port range, and VLAN Wait to define the ACL.
Security	ARP intrusion detection function ARP message rate limiting function Port-based IEEE802.1X certification Port broadcast message suppression SSL ensures data transmission security Port isolation, IP source address protection Host data backup mechanism, Anti-DoS attack Limit on the number of MAC addresses learned AAA&RADIUS certification, MAC address black hole User hierarchical management and password protection SSH 2.0 provides a secure encrypted channel for user login

DHCP

DHCP Client, DHCP Snooping, DHCP Server

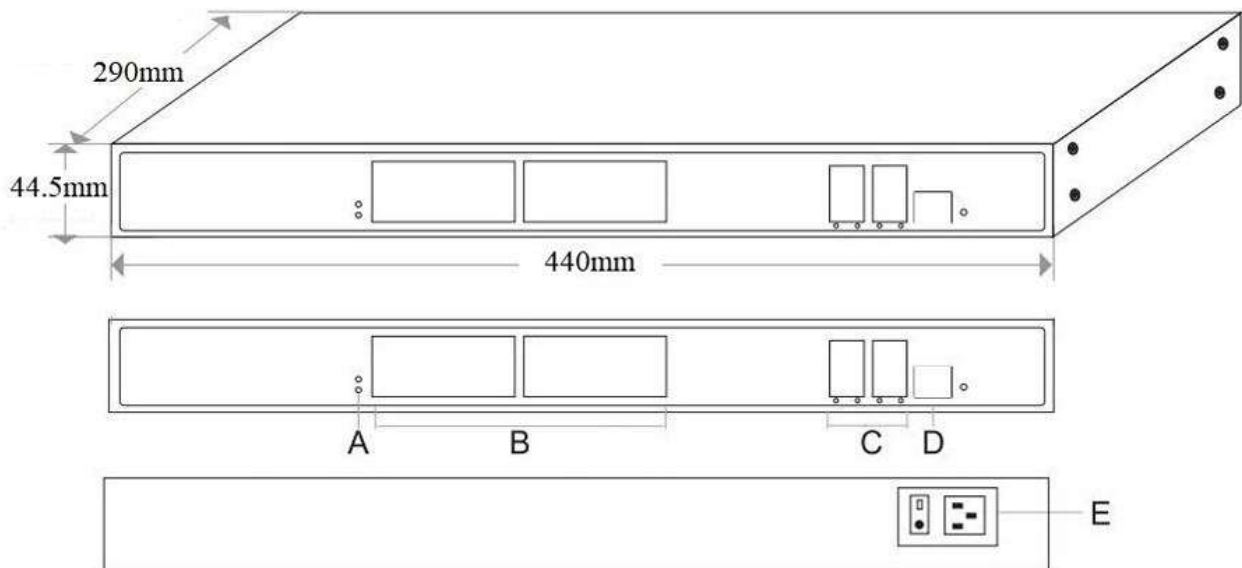
Management

Web network management (https)
View CPU real-time utilization status
Link Layer Discovery Protocol (LLDP)
NTP clock, SNMP V1/V2/V3, System work log
One click recovery, Ping detection, Cable status check
ONV NMS platform cluster management (LLDP+SNMP)
Console/ AUXModem/ Telnet/ SSH2.0 and CLI configuration
FTP, TFTP, Xmodem, SFTP file upload and download management

System

Category 5 and above Ethernet cables
Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Microsoft Internet Explorer 10 or higher
TCP/IP, network adapters, and network operating systems (such as Microsoft Windows, Linux, or Mac OS X) are installed on each computer in the network over Category 5 and above Ethernet cables.

DIMENSION



- A. Working indicator
- B. 16*10/100/1000M PoE ports
- C. 4*100/1000M SFP ports
- D. Console port
- E. Power input port AC100-240V, 50/60Hz

APPLICATION

