



24 Port Gigabit PoE+ Switch with 4 Gigabit Combo Ports

#### 1.Overview

The GS2028PS4 Gigabit Managed POE Switch is a Green Energy-Saving POE Switch independently . It adopts High-Quality and High-Speed Network IC and the most stable POE Chip. The POE port meets the IEEE802.3af or IEEE802.3at standard. This model can provide seamless connection for 10/100/1000M Ethernet, and the POE power port can automatically detect and power the powered devices that comply with the IEEE802.3af or IEEE802.3at standards. The Non-POE devices are forcibly powered and only transmit data.

#### 2.Target Industries

1.HD monitor transmission and power supply

2.Wireless AP layout transmission and power supply

3.Network telephone transmission , intelligent house and home system

4.Intelligent transportation supervisory system (ITS)

5. High-speed Way supervisory/Tele-Communication System

- 6. Security protection system, TV medical treatment
- 7. Long-distance Muti-media Schooling, Campus monitoring
- 8. Long-distance broadcast television transmission system
- 9. High-building Security Protection, Military Tele-Com projects

#### 3. Features

1. Can transfer data for network surveillance cameras;

2. 24 x 10/100/1000Mbps auto-sensing POE Ports, 4 x 10/100/1000Mbps Combo Ports, 1 x Console Port;

3. Support IEEE802.3/IEEE802.3i/IEEE802.3uIEEE802.3ab/IEEE802.3z, IEEE802.3af/at, store-and-forward;

4. Compatible with IEEE802.3at (30W) and IEEE802.3af (15.4w);

5. Ethernet port supports 10/100/1000M adaptive and POE functions;

6. Panel indicator monitoring the status and help failure analysis;

7. Fanless design, Natural Cooling, 1U Rack Mount;

8. Support 802.1x port authentication, support AAA authentication, support TACACS+ authentication;

9. Support WEB, TELNET, CLI, SSH, SNMP, RMON management;

10. Support POE Power Management;

11. Lightning Protection Surge: General Mode 6KV, Differential Mode 4KV, ESD 15KV.

# 4. Hardware Specification

Model	GS2028PS4
Interface	24*10/100/1000M POE Ports + 4*Gigabit SFP/TP Combo Ports + 1*Console Port
Network Protocols	IEEE 802.3 / IEEE 802.3u / IEEE 802.3ab/ad/az/af/at / IIEEE 802.3x IEEE 802.1q / IEEE 802.1p,QoS / IGMP Snooping
PoE Parameters	PoE Standard: IEEE802.3at (30W) and IEEE802.3af (15.4w)
	PoE compatibility: IEEE 802.3af/at adaptive
	PoE port output: DC48-55V
	Power Pin Assignment: Power over spare pairs 1/2(+) and 3/6 (-)
Port Lightning Protection	General Mode 6KV,
	Differential Mode 4KV,
	ESD 15KV.
Network Transmission	10BASE-T: Cat3, 4, 5 UTP (≤ 100 m)
	100BASE-TX: UTP (≤100 m) above Cat5
Medium	1000BASE-TX: UTP (≤100 m) above Cat5
Optical	Multimode fiber: 1310nm, 2Km
Optical	Single mode fiber: 1310nm, 20/40 Km / 1550nm, 60/80/100/120Km
The LED indicator	SYS, PWR, Link (lines 2, 4) / Act (lines 1, 3)
	Machine input voltage: AC110-240V;
Power Supply	Output: DC52V5.76A
	Total power: 300W
Physical Dimension	Product size (L×W×H): 445mm× 285mm× 45mm
Physical Dimension	Package size (L×WxH): 470mm × 350mm × 120mm
	Operating Temperature:-20° ~ 55 ° C;
Working Environment	Storage Temperature: -40 ° ~ 85 ° C;
	Operating Humidity: 10% ~ 95%, non-condensing
	Working height: up to 10,000 feet (3,000 meters)
	Storage height: up to 10,000 feet (3,000 meters)
MTBF	100,000 hours

## 5. Layer 2 Software Function

	Enable/Disable Port
Port Management	Speed、Duplex、MTU Setting
	Flow-control
	Port Information Check
Port Mirroring	Supports both side-way port mirroring
Port Speed Limit	Supports port-based input
	output bandwidth management
Port Isolation	Support the downlink port isolation,
	and can communicate with the uplink port
	Supports unknown unicast, multicast,
Storm Suppression	unknown multicast, broadcast type storm suppression
	Storm suppression based on bandwidth regulation and
	storm filtering
Link Aggregation	Support static manual aggregation
	Support LACP dynamic aggregation
	Access
	Trunk
VLAN	Hybrid
VLAN	Support port, protocol, MAC-based VLAN partitioning
	Support GVRP dynamic VLAN registration
	Voice VLAN
	Support static addition, deletion
MAC	MAC address learning limit
	Support dynamic aging time setting
	Support STP spanning tree protocol
Spanning tree	Supports RSTP Rapid Spanning Tree Protocol
	Supports MSTP Rapid Spanning Tree Protocol
	Support static addition, deletion
Multicast	IGMP-snooping
ויועונוכמסנ	Support MLD-Snooping
	Support v1/2/3 dynamic multicast monitor
DDM	Support SFP/SFP+DDM

### 6. Technical Indicators

Bandwidth	56Gbps (non-blocking)
Packet Forwarding rate	41.66Mpps
Packet Buffer Memory	4M
Memory Capacity	128MB
Flash Capacity	16MB
Jumbo frame	9.6Kbytes
VLANs	4096
MAC	8K
Forwarding Mode	Store-And-Forward

### 7. Extended Function

Based on source MAC, destination MAC, protocol type, source IP,
destination IP, L4 port
Based on 802.1p (COS) classification
Based on DSCP classification
Classification based on source IP, destination IP, and port number
Support SP, WRR scheduling strategy
Support flow rate limit CAR
Support LLDP link discovery protocol
Add/delete users
User login, operation, status, events
DOS defense
Support CPU protection and limits the rate of sending cpu packets
ARP binding (IP, MAC, PORT binding)
Support 802.1x port authentication
Support AAA certification
Support ping、telnet、trace
Device reset, configuration save/restore, upgrade management,
time setting, etc.

### 8. Management function

CLI	Support serial port command line management
SSH	Support SSHv1/2 remote management
TELNET	Support telnet remote management
WEB	Support Layer 2 settings, Layer 2 and Layer 3 monitor
SNMP	SNMP V1/V2/V3
	Support trap: ColdStart, WarmStart, LinkDown, LinkUp
RMON	Support RMON v1
POE	Support PoE power supply
Other functions	Support DHCP Snooping, Option82
	Support dynamic ARP detection
	Support TACACS+ certification
	Support DNS certification
	Support port security settings
	Support MVR protocol
	Support cable detection VCT function
	Support UDLD protocol