

# Full Gigabit Layer 2 Managed PoE Switch

PS3024GS PS3016GS PS2010G

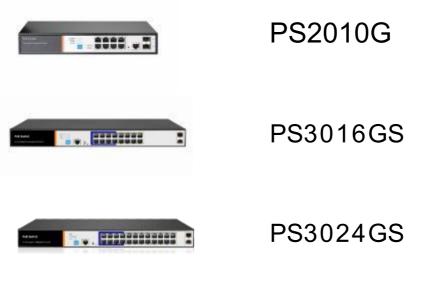
# **Product Brochure**

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# **Product introduction**

HORED Layer 2 managed POE series is a managed POE switch specially designed for security transmission and WIFI coverage. It can meet the PoE power supply requirements of various types of devices such as WIFI AP, IPcamera, WIFI bridge, and IP phone. The product adopts a new generation of high-performance hardware and software platforms, provides flexible and cost-effective access and Gigabit uplink ports, supports complete security protection mechanisms, complete ACL/QoS policies and rich VLAN functions, easy to manage and maintain, and meets the needs of users. For the networking requirements of easy management, high security and low cost of network equipment, it is suitable for various application scenarios of campus, hotel and enterprise campus network access, aggregation, and core.



PS2010G : 8 Gigabit Uplink Port, 2 Gigabit SFP Port

PS3016GS: 16 Gigabit Uplink Port,2 Gigabit SFP Port

PS3024GS: 24 Gigabit Uplink Port,2 Gigabit SFP Port

# **Main Features**

## Port 6KV lightning protection

• All ports support 6KV lightning protection, PSE short circuit protection, PoE overload, power supply over temperature protection, over voltage protection, surge current protection and other protection features.

## AI smart button

• Al Extend: 1-8 ports support long-distance power supply of 250 meters (recommended to use super five or more network cables).

• Al VLAN: Isolate ports 1-24 from each other, which can effectively suppress network storms and improve network performance.

- AI QoS: Prioritize the identified video data for smoother video transmission.
- Al PoE: Automatically detect the power receiving port, find a dead device, and restart the device after power off.

### Powerful business processing capabilities

• Support 802.1Q VLAN, MAC VLAN, IP VLAN, users can flexibly divide VLAN as needed.

• Support QoS, 8 port queues, support port priority, 802.1P priority, DSCP priority, support SP, WRR, SP+WRR, WFQ priority scheduling algorithm.

• Support ACL, support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, provide flexible and secure access control policy.

• Support IGMP v1/v2/v3 Snooping, MLD v1/v2 Snooping, to meet the requirements of multiterminal HD video surveillance or video conference.

• Supports the fast leave mechanism and querier of Layer 2 multicast, supports Layer 2 IPv4 static multicast and Layer 2 IPv6 static multicast.

## Perfect security mechanism

• Complete security authentication mechanism: It supports IEEE 802.1x, Radius, Tacacs+, etc., and can provide users with a complete security authentication mechanism.

• The perfect loop detection mechanism can ensure the stable operation of the network for a long time.

• Provide port isolation in the same VLAN, and security features such as DHCP-Snooping, IP+MAC+port binding, etc., to further ensure user data security.

Support ARP protection, IP source protection, DoS protection.

• Support to restrict user access based on port number, IP address, and MAC address.



### **Diverse reliability protection**

• Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols to eliminate Layer 2 loops and implement link backup.

• Supports loop protection, root bridge protection, TC protection, BPDU protection, and BPDU filtering.

• Support 50ms switching of optical ports.

## Perfect POE power supply function

• Support 802.3af/at standard, built-in high-power power supply, meet the needs of POE scenarios such as security monitoring, wireless coverage, and IP telephony.

• Support PoE power limit and set PoE port priority. When the power exceeds the limit, the power supply of the high-priority port will be given priority.

• Support setting PoE power supply time period, users can control the time period of PoE power supply according to their own needs.

• Support PoE chip status check, users can view the PoE chip temperature, output power and other parameters in real time through the web page.

#### Flexible and convenient management and maintenance

• Supports various management methods such as Console, Telnet, and SSH.

• Support WEB network management (HTTP, HTTPS, SSL V3), which is simpler and more efficient, and is convenient for users to install and debug.

• Supports file upload and download management in TFTP mode.

• Support SNMP V1/V2/V3 to facilitate device management through the network management platform.

 Support one-stop management and maintenance of Fengrunda Apollo cloud platform, which can realize all-round remote operation and maintenance such as automatic device discovery, network topology management, and remote configuration management of devices.

# **Product Specifications**

Hardware Specifications				
Product number		PS201 0G	PS3016GS	PS3024GS
Network protocol standard		IEEE802.3、IEEE802.3i、IEEE802.3u、 IEEE802.3ab、IEEE802.3z、IEEE802.3ad、 IEEE802.3x、IEEE802.3af/at、IEEE802.1p、 IEEE802.1q、IEEE802.1w、IEEE802.1d、 IEEE802.1s		
Fixed port	Gigabit PoE port	8	16	24
	Gigabit SFP port	2	2	2
	Console Port	1 (baud rate 115200)		
Performance Specifications	Forwarding mode	Store and forward		
	MAC address table	8К		
	Port cache	4.1Mb		
	Bandwidth	20Gb ps	36Gbps	52Gbps
	Packet forwarding rate	14.9M pps	20.000000	38.7Mpps
	PoE Standard	IEEE 802.3af、IEEE 802.3at		
	PoE Pin	1/2(+) , 3/6(-)		
PoE Power	Port maximum power supply	30W		
	The maximum power supply of the whole machine	150W	150W	250W
Input power	AC	100-240V~ 50/60Hz		
Physical Specifications	length*width*height	mm	440*180*44 mm	
Use environment	working environment	Working temperature: 0°C ~ 40°C, working humidity: 10% ~ 90%RH without condensation		
	storage environment	Storage temperature: -40°C ~ 70°C, storage humidity: 5% ~ 90%RH non-condensing		

Software Specifications			
VLAN	Support 4K VLANs		
	Support 802.1Q VLAN、MAC VLAN ,IP VLAN		
DHCP	Support DHCP Snooping		
MAC Address	Follow IEEE 802.1d standard		
table	Support MAC address automatic learning and aging Support static, dynamic, filtering address table		
	Password protection		
	Support to restrict user access based on port number, IP address, MAC address		
	Support HTTPS、SSL V3、TLS V1、SSH V1/V2		
Cafata faatuura	Support IP-MAC-PORT ternary binding		
Safety features	Support ARP protection, IP source protection, DoS protection Support DHCP Snooping, DHCP attack protection		
	Support 802.1X authentication, AAA		
	Support port security and port isolation		
	Support CPU protection function		
PoE Manage	Support PoE power limit Support PoE chip status check Support setting PoE port priority Support setting PoE power supply time period Support intelligent power supply		
ACL	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function Support port mirroring, flow rate limiting, QoS remarking		
QoS	Supports 8 port queues Support port priority, 802.1P priority, DSCP priority Support SP, WRR, SP+WRR, WFQ priority scheduling algorithm		
Spanning tree	Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols Support loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering Support optical port 50ms switching		

Software Specifications				
	Support IGMP v1/v2/v3 Snooping			
	Support MLD v1/v2 Snooping			
Multicast	Fast leave mechanism and querier supporting Layer 2 multicast			
	Support Layer 2 IPv4 static multicast			
	Support Layer 2 IPv6 static multicast			
Storm suppression	Support multicast suppression Support broadcast suppression			
	Support unknown unicast suppression			
	Support static aggregation Support dynamic aggregation			
Link aggregation	Support based on IP, MAC, mixed load balancing mode			
	A maximum of 32 aggregation groups are supported			
IPv6	Support IPv6 Ping、IPv6 Tracert、IPv6 Telnet			
	Support IPv6 SSH 、IPv6 SSL			
	Support WEB network management (HTTP、HTTPS、SSL V3)			
	Support CLI (Telnet、SSH V1/V2、Local Console port)			
	Support SNMP V1/V2/V3			
	Support RMON V1/V2			
	Support LLDP device discovery			
Management and	Support NTP time synchronization			
maintenance	Support DNS Client			
	Support CPU monitoring, memory monitoring			
	Support system log, graded warning			
	Support Ping, Tracert detection, cable detection			
	Support Apollo cloud platform one-stop management and			
	maintenance			



# **Networking Application**

