

# 8-Port Gigabit Managed Ethernet PoE Switch PS2010G

# **Product Brochure**

Shenzhen Fengrunda Technology Co., Ltd



### **Product Introduction:**

PS2010G 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 equipment such as WIFI AP, IP-camera, WIFI bridge, and IP phone. The product adopts a new generation of high- performance hardware and software platform, provides flexible and cost- effective full-gigabit access and uplink ports, supports complete security protection mechanisms, complete ACL/QoS policies and rich VLAN functions. It is easy to manage and maintain, and meets users' requirements for easy management, high security, and low cost of network equipment. It is suitable for campus, hotel, and enterprise campus network access, aggregation, and core multiple application scenarios.





## **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.

### Al smart button

- Al Extend: 1-8 ports support long-distance power supply of 250 meters (recommended to use super five or more network cables).
- AI VLAN: Isolate ports 1-24 from each other, which can effectively suppress network storms and improve network performance.
- Al 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 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 multi terminal 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.

### **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 changing over optical ports.



### 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.

### **Perfect POE power supply function**

- •It supports the 802.3af/at standard and has a built-in high-power power supply to 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:	
Networking Interface	• 8*10/100/1000Mbps RJ45 ports (POE)
	• 2*SFP ports
	• 1*Console port
Network Protocol	• IEEE 802.3,IEEE 802.3i,IEEE 802.3u,IEEE 802.3ab, IEEE 802.3z,IEEE 802.3ad,IEEE 802.3x,IEEE 802.1p, IEEE 802.1q,IEEE 802.1d,IEEE 802.1s,IEEE 802.1w, IEEE 802.3af,IEEE 802.3at
Performance	Bandwith: 20Gbps
	Packet forwarding rate: 14.88Mpps
	MAC table size: 8K
	• Forwarding type: Storage and forwarding
LED Indicator	• 10*Link/Act indicator
	8*PoE indicator
	• 1*Power indicator
	• 1*SYS indicator
POE Pin	• 1/2 (+) , 3/6 (-)
	• Power input: AC 100-240V/50-60Hz
Power Supplier	• Single port MAX. power: 30W
	● PoE budget: 150W
Dimension	• W*D*H: 250mm×180mm×44mm
Environment	• Operating temperature: 0°C~40°C
	Storage temperature: -40°C∽70°C
	• Operating humidity: 10%~ 90% RH non condensing
	• Storatge humidity: 5%~90% RH non condensing
Safte Regulation	CE/ROHS/FCC



Software Specification	ations:	
Protocol Standard	IEEE 802.3:Ethernet media access control (MAC)	
	IEEE 802.3i:10BASE-T Ethernet	
	IEEE 802.3u:100BASE-TX Fast Ethernet	
	IEEE 802.3ab:1000BASE-T Gigabit Ethernet	
	IEEE 802.3z:1000BASE-X Gigabit Ethernet (optical fiber)	
	IEEE 802.3ad:Standard method of link aggregation	
	IEEE 802.3x::Flow control	
	IEEE 802.1p:LAN layer 2 qos/cos protocol related to traffic priority (multicast filtering function)	
	IEEE 802.1q:VLAN Bridge operation	
	IEEE 802.1d:STP Spanning tree	
	IEEE 802.1s:MSTP Spanning tree	
	IEEE 802.1w:RSTP Spanning tree	
	IEEE 802.3af	
	IEEE 802.3at	
One-click Shortcut Function	AI VLAN	
	Al Extend	
	AIPoE	
	AI QoS	
DHCP	Support DHCP Snooping	
	Support 4K VLAN	
VLAN	Support 802.1Q VLAN,MAC VLAN ,IP VLAN	
	Voice VLAN	
MAC Table	Support IEEE 802.1d standard	
	Support MAC addresses automatic learning and aging	
	Support static, dynamic and filtered address tables	
Security Features	Password guard	
	Support restricting user access based on port number, IP address and MAC address	
	Support HTTPS,SSL V3,TLS V1,SSH V1/V2	
	Support IP-MAC-PORT ternary binding	
	Support ARP protection, IP source protection, DOS protection	
	Support DHCP Snooping, DHCP Attack protection	
	Support 802.1X certification,AAA	
	Support Port security, port isolation, CPU protection	



Software Specificati	Software Specifications:		
PoE Management	Support PoE power limit		
	Support PoE chip status check		
	Support setting PoE port priority		
	Support setting PoE power supply time period		
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 IGMP v1/v2 Snooping		
	Support multicast VLAN		
Multicast	Fast leave mechanism and querier supporting Layer 2 multicast		
	Support multicast filtering,packets statistics,unkown multicast discarding		
	Support multicast suppression		
Storm Suppression	Support broadcast suppression		
	Support unknown unicast suppression		
	Support static aggregation		
LACP	Support dynamic 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		
Management & Manitenance	Support WEB Managed (HTTP,HTTPS,SSL V3)		
	Support CLI (Telnet,SSH V1/V2)		
	Support SNMP V1/V2/V3		
	Support LLDP,RMON		
	Support ARP protection,IP source guard,DoS guard		
	Support CPU monitoring,memory monitoring		
	Support syslog,alarm levels		
	Support Ping,Tracert detection,cable detection		



# **Networking application:**

