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16-Port Gigabit Managed Ethernet PoE Switch

PS3016GS

Product Brochure

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Product Introduction:

PS3016GS is a Layer 2 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, IP-camera, 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.

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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

• AI 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 1-16 from each other, which can effectively suppress network storms and
improve network performance.

• AI QoS: Prioritize the identified video data for smoother video transmission.

• AI 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 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.

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.

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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.

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Product Specifications：

Hardware Specifications:	
Networking Interface	● 16*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：36Gbps ● Packet forwarding rate：26.8Mpps ● MAC table size：8K ● Forwarding type：Storage and forwarding
LED Indicator	● 18*Link/Act indicator ● 16*PoE indicator ● 1*Power indicator ● 1*SYS indicator
POE Pin	● 1/2（+），3/6（-）
Power Supplier	● Power input：AC 100-240V/50-60Hz ● Single port MAX. power：30W ● PoE budget：150W
Dimension	● W*D*H：440mm×180mm×44mm
Environment	● Operating temperature：0℃~40℃ ● Storage temperature：-40℃～70℃ ● Operating humidity：10%~ 90% RH non condensing ● Storatge humidity：5%～90% RH non condensing
Safte Regulation	● CE/ROHS/FCC

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Software Specifications	
VLAN	Support 4K VLANs Support 802.1Q VLAN,MAC VLAN ,IP VLAN
DHCP	Support DHCP Snooping
MAC Address table	Follow IEEE 802.1d standard Support MAC address automatic learning and aging Support static, dynamic, filtering address table
Safety features	Password protection Support to restrict user access based on port number, IP address, 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 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

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Software Specifications	
Multicast	Support IGMP v1/v2/v3 Snooping
	Support MLD v1/v2 Snooping
	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
Link aggregation	Support static aggregation 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 and maintenance	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
	Support NTP time synchronization
	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