

# 8-Port 2.5G L3 Managed Ethernet PoE Switch PS3008XGPSH

# **Product Brochure**

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### **HORED**丰润达<sup>®</sup>

# **Product Introduction:**

PS3008XGPSH is a three-layer managed POE switch designed specifically for security transmission and WIFI coverage. The maximum power of a single port meets the 90W BT standard and can meet the POE power supply needs of various types of devices such as WIFI AP&bridge, IP camera, IP phone, etc. The product adopts a new generation of high-performance hardware and software platforms, providing flexible and cost-effective 2.5G access and 10 Gigabit uplink ports. It supports three-layer routing protocols, complete security protection mechanisms, comprehensive ACL/QoS policies, and rich VLAN functions, making it easy to manage and maintain, meeting users' networking needs for easy management, high security, and high-density network equipment. It is an ideal choice for various commercial network applications.



# 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.

#### Advanced hardware architecture design, powerful processing capability

• Realtek high-performance switching chips are used to meet the application requirements of various complex scenarios, greatly improve the network data processing rate, and prevent data transmission from being stuck.

#### 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.

• Support RIP dynamic routing protocol, solve the routing problem after the small and medium-sized network is divided into subnets, and simplify the network configuration.

• Support static routing protocol, and manually configure routing entries to realize communication between different network segments.

• Support ARP configuration, so that hosts in different physical networks on the same network segment can communicate normally.

#### 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**

• Support the 802.3af/at/bt standard, with a maximum single port support of 90W output and a built-in power supply, meeting the requirements of POE scenarios such as security monitoring, wireless coverage, and IP phone.

• Support PoE power limit and set PoE port priority. When the power exceeds the limit, priority is given to ensuring power supply to the high priority ports.

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

• Support PoE chip status viewing, allowing users to view real-time parameters such as PoE chip temperature and output power through a 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     | <ul> <li>8*1000M/2.5G RJ45 ports (POE)</li> <li>2*10G electric ports</li> <li>2*10G SFP+ ports</li> <li>1*Console port</li> </ul>   |  |
| Network Protocol         | <ul> <li>IEEE 802.3,IEEE 802.3i,IEEE 802.3u,IEEE 802.3ab,</li> <li>IEEE 802.3z,IEEE 802.3ad,IEEE 802.3x,IEEE 802.1p,</li> <li>IEEE 802.1q,IEEE 802.1d,IEEE 802.1s,IEEE 802.1w,</li> <li>IEEE 802.3af,IEEE 802.3at,IEEE 802.3bt</li> </ul> |  |
| Performance              | <ul> <li>Bandwith: 120Gbps</li> <li>Packet forwarding rate: 89.3Mpps</li> <li>MAC table size: 16K</li> <li>Port buffer: 12Mb</li> <li>Forwarding type: Storage and forwarding</li> </ul>  |  |
| LED Indicator            | <ul> <li>12*Link/Act indicator</li> <li>8*PoE indicator</li> <li>1*Power indicator</li> <li>1*SYS indicator</li> </ul>  |  |
| POE Pin                  | • 1/2 (+) , 3/6 (-)   |  |
| Power Supplier           | <ul> <li>Power input: AC 100-240V/50-60Hz</li> <li>Single port MAX. power: 1-8 ports 90W</li> <li>PoE budget: 250W</li> </ul>   |  |
| Dimension                | • W*D*H: 440mm×320mm×44mm   |  |
| Environment              | <ul> <li>Operating temperature: 0°C~40°C</li> <li>Storage temperature: -40°C ~70°C</li> <li>Operating humidity: 10%~ 90% RH non condensing</li> <li>Storatge humidity: 5% ~90% RH non condensing</li> </ul>                               |  |
| Safte Regulation         | • CE/ROHS/FCC   |  |

| Software Spe          | Software Specifications:  |  |  |
|-----------------------|---|--|--|
|                       | 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)   |  |  |
| Protocol<br>Standards | 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/at/bt  |  |  |
| L3 Interface          | Support L3 interface  |  |  |
|                       | Support IPV4,IPV6 addresses configuration   |  |  |
|                       | Support ARP configuration   |  |  |
|                       | Support ND configuration  |  |  |
| L3 Routing            | Support IPV4 static routing   |  |  |
|                       | Support IPV4 RIP v1/v2  |  |  |
|                       | Support IPV4 OSPFv2   |  |  |
|                       | Support IPV6 static routing   |  |  |
|                       | Support IPV6 RIPng  |  |  |
|                       | Support IPV6 OSPFv3   |  |  |

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| Software Spe | ecifications:   |
|--------------|---|
| VLAN         | Support 4K VLAN   |
|              | Support 802.1Q VLAN,MAC VLAN ,IP VLAN, Voice VLAN   |
| DHCP         | Support DHCP server   |
|              | Support DHCP relay  |
|              | Support DHCP Snooping   |
| MAC Table    | Support IEEE 802.1d standard  |
|              | Support MAC addresses automatic learning and aging  |
|              | Support static, dynamic and filtered address tables   |
|              | Password guard  |
|              | Support restricting user access based on port number, IP address and MAC address                |
|              | Support HTTPS,SSL V3,TLS V1,SSH V1/V2   |
| Security     | Support IP-MAC-PORT ternary binding   |
| Features     | Support ARP protection, IP source protection, DOS protection                                    |
|              | Support DHCP Snooping, DHCP Attack protection   |
|              | Support 802.1X certification,AAA  |
|              | Support Port security, port isolation   |
|              | Support CPU Protection function   |
|              | Support PoE power limit   |
| POE          | 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 speed restriction, QoS re marking                                  |
| QoS          | Support 8 port queues   |
|              | Support port priority, 802.1p priority, DSCP priority   |
|              | Support SP,WRR,SP+WRR,WFQ priority scheduling   |
| STP          | Support STP(IEEE 802.1d), RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) standard                      |
|              | Support Loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering |
|              | Support optical port 50ms switching   |

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#### **Software Specifications:**

| Software Spec         |   |
|-----------------------|---|
| Multicast             | Support IGMP v1/v2/v3 Snooping                                    |
|                       | Support MLD v1/v2 Snooping  |
|                       | Support Fast leave mechanism and querier of layer 2 multicast     |
|                       | Support Layer 2 IPv4 static multicast                             |
|                       | Support Layer 2 IPv6 static multicast                             |
|                       | Support IGMP v1/v2/v3 layer 3 multicast                           |
| Storm<br>Suppression  | Support Multicast suppression                                     |
|                       | Support Broadcast suppression                                     |
|                       | Support Unknown unicast suppression                               |
| LACP                  | Support Static convergence  |
|                       | Support Dynamic convergence                                       |
| LACP                  | Support based on IP, MAC and mixed load balancing mode            |
|                       | Support 32 aggregation groups at most                             |
| IPv6                  | Support IPv6 Ping,IPv6 Tracert,IPv6 Telnet                        |
|                       | Support IPv6 SSH,IPv6 SSL   |
|                       | Support WEB management(HTTP,HTTPS,SSL V3)                         |
|                       | Support CLI (Telnet,SSH V1/V2,local serial port)                  |
|                       | Support SNMP V1/V2/V3   |
|                       | Support RMON V1/V2  |
|                       | Support LLDP device discovery                                     |
| Network<br>management | Support NTP time synchronization                                  |
|                       | Support DNS Client  |
|                       | Support CPU Monitoring, memory monitoring                         |
|                       | Support System log, classification warning                        |
|                       | Support Ping, Tracert Detection, cable detection                  |
|                       | Support Apollo cloud platform one-stop management and maintenance |
| -                     |   |

# **Networking application:**

