

HORED 丰润达®

**8ports gigabit layer 2
AI PoE switch
AI2010GX**

Product brochure

Shenzhen Fengrun Technology Co., Ltd

Product introduction :

AI2010GX is a managed AI 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. products using a new generation of high-performance hardware and software platforms, providing flexible and cost-effective access and Gigabit uplink ports, supports complete security protection mechanisms, complete ACL/QoS policies and rich VLAN functions, it is easy to manage and maintain , meet the users' requirements for network equipment easy to manage, high security and low cost. it is suitable for various application scenarios of campus, hotel and enterprise campus network access, aggregation, and core.



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 250 meters long-distance power supply (recommended to use Cat 5 or over cables);
- AI VLAN: 1-8 ports are Isolated from each other, which can effectively restrain network storms and improve network performance;
- AI QoS: Prioritize the identified video data to make video transmission smoother;
- AI PoE: automatically detects the working status of the PD device and reboot the device while find it fake dead.

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.

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

- Support Telnet, SSH and other management methods.
- 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 HORED 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

Network Interface	<ul style="list-style-type: none"> ● 8 10/100/1000Mbps RJ45 ports ● 2 Gigabit SFP fiber ports
protocol standard	<ul style="list-style-type: none"> ● 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
Performance Specifications	<ul style="list-style-type: none"> ● Backplane bandwidth : 20Gbps (non-blocking) ● Packet forwarding rate : 14.9Mpps ● MAC address table : 8K ● port cache : 4.1Mb
	<ul style="list-style-type: none"> ● Forwarding mode: store and forward
LED indicator	<ul style="list-style-type: none"> ● 10 Link/Act indicator ● 8 PoE indicator ● 1 Power indicator ● 1 SYS indicator
PoE pin	<ul style="list-style-type: none"> ● 1/2 (+) , 3/6/ (-)
Power support	<ul style="list-style-type: none"> ● Single port maximum output power : 30W ● The maximum power of the whole machine: 96W
Physical Specifications	<ul style="list-style-type: none"> ● Dimensions (LxWxH) : 225mm×120mm×35mm
Environmental Specifications	<ul style="list-style-type: none"> ● Working temperature : 0°C~40°C ● Storage temperature : -40°C~70°C ● Working humidit : 10%~ 90% RH without condensation ● Storage humidity : 5%~90% RH without condensation
safety regulations	<ul style="list-style-type: none"> ● CE/ROHS/FCC

Software specification

protocol standard	<p>IEEE 802.3:Ethernet media access control (MAC) protocol</p> <p>IEEE 802.3i:10BASE-TEthernet</p> <p>IEEE 802.3u:100BASE-TX Fast Ethernet</p> <p>IEEE 802.3ab:1000BASE-T gigabit Ethernet</p> <p>IEEE 802.3z:1000BASE-X gigabit Ethernet (optical)</p> <p>IEEE 802.3ad:perform link aggregation standard way</p> <p>IEEE 802.3x:flow control</p> <p>IEEE 802.1p:LAN Layer 2 QoS/Cos protocol for traffic prioritization (multicast filtering function)</p> <p>IEEE 802.1q:VLAN bridge operation</p> <p>IEEE 802.1d:STP spanning tree</p> <p>IEEE 802.1s:MSTPspanning tree</p> <p>IEEE 802.1w:RSTPspanning tree</p> <p>IEEE 802.3af</p> <p>IEEE 802.3at</p>
one-click shortcut function	<p>AI VLAN</p> <p>AI Extend</p> <p>AIPoE</p> <p>AI QoS</p>
DHCP	<p>support DHCP Snooping</p>
VLAN	<p>support 4K VLAN</p> <p>support 802.1Q VLAN、 MAC VLAN ,IP VLAN</p> <p>Voice VLAN</p>
MAC address table	<p>Follow IEEE 802.1d standard</p> <p>Support MAC address automatic learning and aging</p> <p>Support static, dynamic, filtering address table</p>
safety features	<p>password protection</p> <p>Support to restrict user access based on port number, IP address, MAC address</p> <p>support HTTPS、 SSL V3、 TLS V1、 SSH V1/V2</p> <p>support IP-MAC-PORT ternary binding</p> <p>support ARP protection、 IP source protection、 DoS protection</p> <p>support DHCP Snooping、 DHCP attack protection</p> <p>support 802.1X认证、 AAA</p> <p>Support port security and port isolation</p>

Software Specifications	
PoE management	Support PoE total power limit Support PoE chip status check Support setting PoE port priority Support setting PoE power supply time period
Access control(ACL)	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function Support port mirroring, port redirection, flow rate limit, QoS remarking
service quality(QoS)	Supports 8 port queues Support port priority, 802.1P priority, DSCP priority Support 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
multicast	Support IGMP v1/v2 Snooping Support multicast VLAN Support multicast filtering, packet statistics, unknown multicast discard
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) Support SNMP V1/V2/V3 Support LLDP、RMON Support ARP protection, IP source protection, DoS protection Support CPU monitoring, memory monitoring Support system log, graded warning Support Ping, Tracert detection, cable detection

networking application

