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8-Port Gigabit Managed Ethernet Switch

NS2010GX

Product Brochure

Product Introduction：

PNS2010GX is a new cloud management switch. The product adopts a new generation of high-performance hardware and software platforms, providing flexible and cost-effective full gigabit access and gigabit uplink ports. It supports complete security protection mechanisms, comprehensive ACL/QoS policies, and commonly used functions such as 802.1Q VLAN, port monitoring, port aggregation, bandwidth control, etc. It is easy to manage and maintain and is suitable for campus, hotel, and enterprise network as an access device.

Main Features：

Port 6KV lightning protection

• All ports support 6KV lightning protection

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.

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.

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	
Network Interface	● 8 10/100/1000Mbps RJ45 Port ● 2 Gigabit SFP Port ● 1 Console Port
Network protocol standard	● 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
Performance Specifications	● Backplane bandwidth：20Gbps ● Packet forwarding rate：14.88Mpps ● MAC address table：8K ● Port Buffer：4.1M ● Forwarding Mode: Store and Forward
Power support	● External power：12V/1A DC
LED indicator	● 10 Link/Act indicators ● 1 SYS system indicator ● 1 Power indicator
Physical Specifications	● Dimensions (LxWxH)：440mm×180mm×44mm
Environmental Specifications	● Working temperature：0℃~40℃ ● Storage temperature：-40℃〜70℃ ● Working humidity: 10%~90% RH non-condensing ● Storage humidity: 5%~90% RH non-condensing
Safety regulations	● CE/ROHS/FCC

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Software Specifications	
VLAN	Support 4K VLAN 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
Access control (ACL)	Support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function Support port mirroring, flow rate limiting, QoS remarking
Quality of service (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 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 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