Data Sheet HTPS5800-8G4GC

LEVEL 34, COMMERCIAL TOWER, 300 GEORGE ST, BRISBANE – AUSTRALIA - QLD
www.htnetglobal.com Tel: +61731959433 Email: hello@htnetglobal.com

L2+ Managed POE Switch 8*10/100/1000 + 4* Gigabit Combo SFP Uplink ports

Product Appearance:

HTPS5800-8G-4GC has 16 ports full Gigabit enterprise class multi-functional PoE network L2+ management switch independently developed by HTN. It is specially designed for enterprise customers to optimize and enhance the design and has higher reliability. Port 1-8 supports PoE power supply of IEEE802.3af/at standard. As PoE power supply equipment, it can automatically detect and identify the power receiving equipment that meets the standard and supply power to it through network cable. The device adopts Realtek new generation high-performance platform and HTN new self-developed switch system, supports flexible 802.1Q VLAN, IGMP, port monitoring, port aggregation, bandwidth control, ring application and other network management functions, and easily adapts to the current complex network application environment.

Port performance

●Provide 8*10/100/1000M RJ45 adaptive PoE ports, all of which can realize line speed forwarding.
●Provide 4 Gigabit RJ45 network ports+4 Gigabit SFP photoelectric multiplexing uplink ports for high-speed uplink transmission.
●It supports the combination of multiple types of ports to facilitate users' flexible networking and meet the networking requirements of various scenarios;
●Each port supports MDI / mdix automatic flip and duplex / rate self-negotiation.
●Support IEEE 802.3x full duplex flow control and backpressure half duplex flow control.

PoE Power Supply Function

●Comply with IEEE 802.3af/at power supply standard, the maximum PoE output power of the whole power is 150W, and the maximum PoE output power of single port is 30W.
●Automatic identification of PoE equipment for power supply without damaging non PoE equipment.
●The PoE port supports the priority mechanism. When the residual power is insufficient, the power supply of the high priority port is given priority to avoid the overload of the equipment.

Strong business processing capability

●Add a variety of new applications based on IPv6 to easily adapt to modern complex network management applications
●Support IEEE 802.1Q VLAN, users can flexibly divide VLAN according to their needs.
●Support voice VLAN, configure QoS parameters for voice data stream, improve the transmission priority of voice data stream and ensure the quality of communication.
●Support QoS, port based, 802.1p based and DSCP based priority modes to optimize bandwidth configuration.
●Supporting ACL, filtering data packets by configuring matching rules, processing operations and time permissions, and providing flexible security access control policies.

●Support IGMP V1 / V2 multicast protocol and IGMP snooping to meet the requirements of multi terminal HD video monitoring and video conference access.
●Support multicast VLAN and multicast filtering transmit data efficiently, save network bandwidth and reduce network load.
●Support port monitoring, copy a packet of the monitored port to the monitoring port to realize network monitoring.
●Support the management and maintenance of equipment through web interface.
●Support port convergence, effectively increase link bandwidth, realize link backup and improve link reliability.

Security Protection

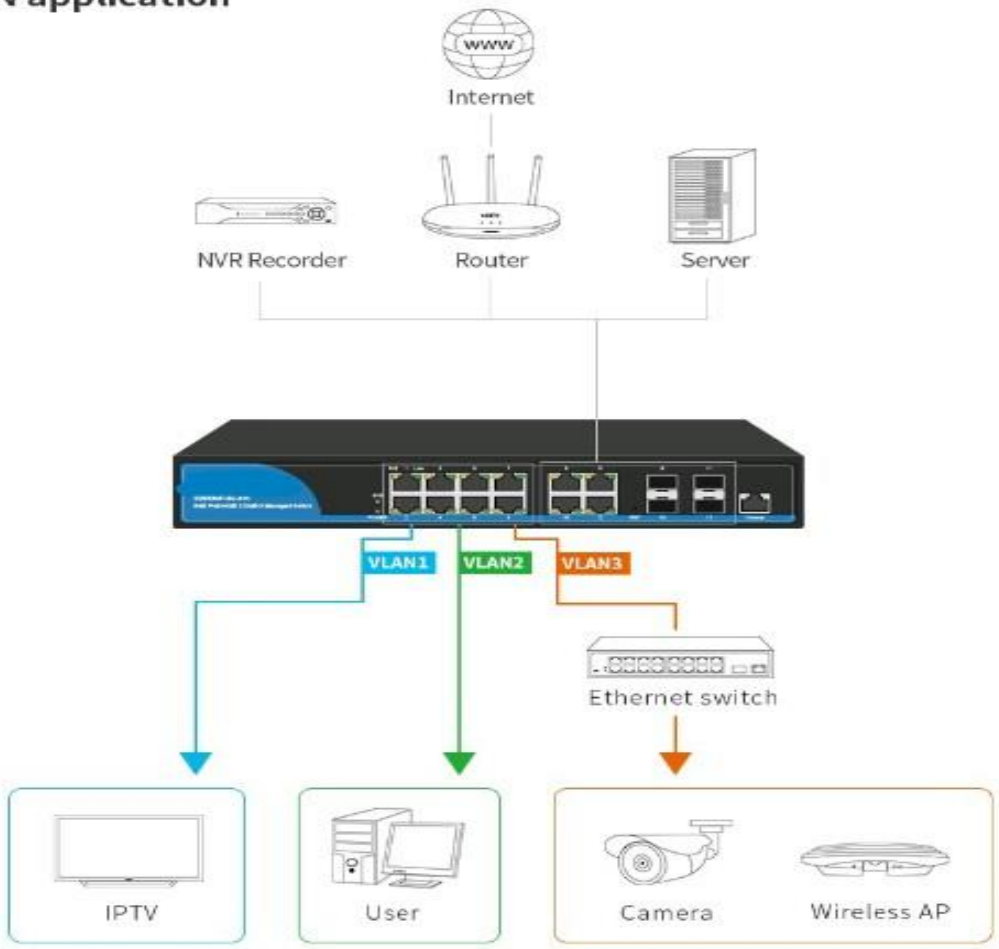
●Support STP / RSTP / MSTP spanning tree protocol, eliminate layer-2 loop and realize link backup.
●Support the spanning tree security function to prevent the devices in the spanning tree network from various forms of malicious attacks.
●Support static aggregation and dynamic aggregation, effectively increase link bandwidth, realize load balancing and link backup, and improve link reliability.

Easy Operation And Maintenance

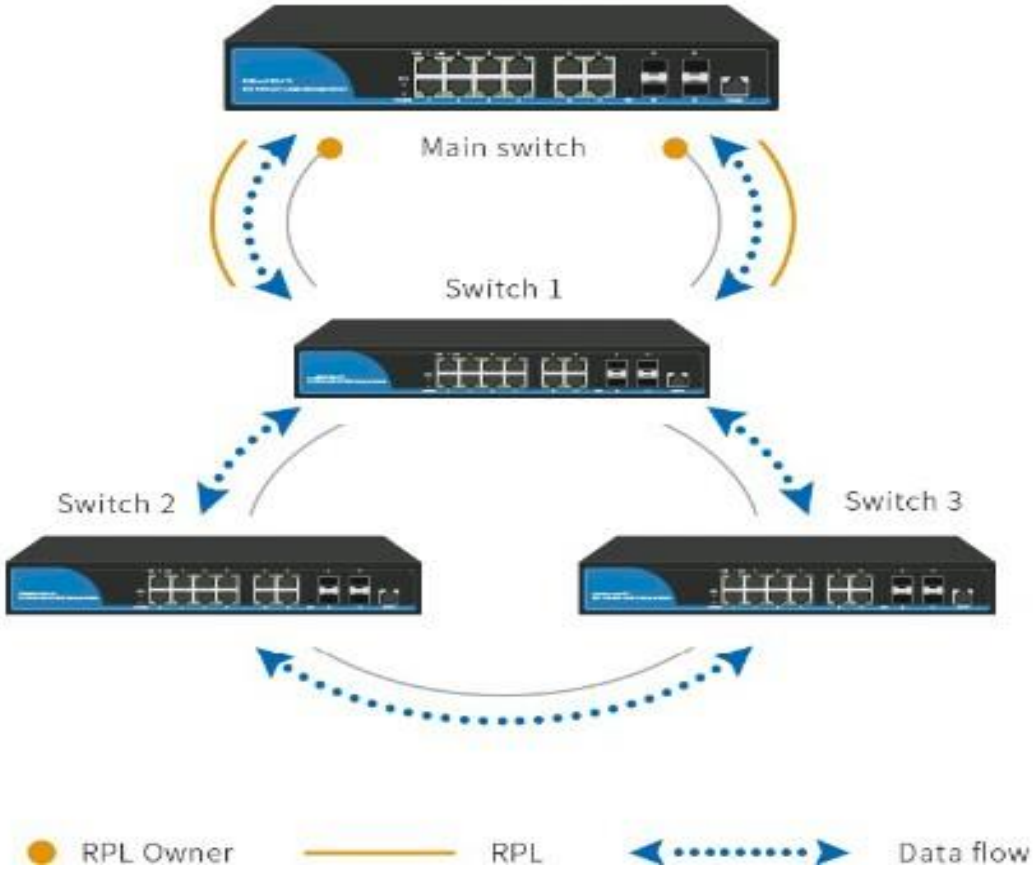
Support web network management, CLI command line (console, telnet), SNMP (V1 / V2 / V3) and other diversified management and maintenance methods.
Support the encryption methods such as HTTPS, SSL V3, tlsv1, sshv1 / V2, and make the management more secure.
Support RMON, system log, port traffic statistics, facilitate network optimization and transformation.
The user can know the working status of the switch through the power indicator (PWR), port status indicator and system status indicator (sys).


Enterprise factory network
Diskless booting
Multimedia classroom
Monitoring
Wireless network

1.VLAN application



2.Loop network application



Model	HTPS5800-8G4GC
Fixed port	8* 10/100/1000M POE electrical ports 4* Gigabit Combo SFP ports 1* Console Port
Reset button	1
Exchange capacity	56/128G
Packet forwarding rate	40.32Mpps
Operating temperature	-20~50°C
storage temperature	-40~70°C
Working humidity	10% to 90% non-condensing
Storage humidity	5% to 95% non-condensing
physical dimension	440mm*210mm*40mm
Total Weight	1.2kg/1.5kg
Input voltage	Built-in power AC 100~240V 50/60HZ
Power consumption Watts	150W
Certificate	CE mark, Commercial; CE/LVD EN60950; FCC Part 15 Class B; RoHS

Layer 2 functions:

Port configuration	Auto-negotiation Flow Control Port Mirror: TX/RX/BOTH; Many-to-1 monitor CPU Mirror Traffic statistics
Link Aggregation	Static link aggregation LACP（Dynamic Trunk/Static Trunk） Algorith based on Source/Destination MAC Algorithm based on Source/Destination IP
MAC Table	Aging Time Static MAC address Dynamic MAC address management
VLAN	4094 Active VLANs 4094 VID 802.1Q Tag VLAN Port VLAN Protocol VLAN MAC VLAN Voice VLAN 802.1ad Q-in-Q tunneling Private VLAN (Protected port) GARP/GVRP
ACL	256ACLs L2, L3 e L4 Time-based ACL IP ACL MAC ACL MAC-IP ACL User-Defined ACL ICMPv6
Spanning tree	802.1D Spanning Tree Protocol (STP) 802.1w Rapid Spanning Tree Protocol (RSTP)

	802.1s Multiple Spanning Tree Protocol (MSTP) Loop Guard Root Guard TC-BPDU Guard BPDU Guard BPDU Filter
Ring Protection	<20ms G.8032 ERPS Ring Fast Ring
Multicast	256 groups IGMP v1/v2/v3 Snooping, Fast Leave MLD Snooping Multicast VLAN IGMP filter MVR Multicast Routing
QOS	8 mapping IDs to 8 level priority queues CoS port-based CoS 802.1p-based CoS DSCP-based Scheduling algorithms SP, WRR, SP+WRR Storm Control (Broadcast, Multicast, Unknown Unicast) Bandwidth control per port SWRR, DWRR for Scheduling Flow Redirect Precedence TOS Rate Limiting（Ingress/Egress） Stri Priority
Security Features	Port Security MAC address filter ARP Association (Manual, ARP scanning, DHCP snooping) ARP Protection AAA DAI DoS (Denial of Service) Classification of packages based on: End.MAC, IP End, TCP / UDP Ports,

	Protocol Type; 802.1x Authentication (port-based e MAC-based) TACACS/TACACS+ Authentication RADIUS Authentication DHCP Filter Guest VLAN SSLv2/SSLv3/TLSv1 SSHv1/SSHv2 Restriction of WEB access based on: IP Address, And. MAC and Port; Port Isolation Loopback detection
Management	SNMP v1/v2c/v3 with Full Private MIBs RMON 4 groups WEB (HTTP/HTTPS) CLI (Telnet, Console, SSHv1/v2) Firmware upgrade via console/web/TFTP Configuration Backup/Reload Dual Firmware LLDP Configuration Export/Import CDP Aware OAM (IEEE802.3ah) CFM (IEEE802.1ag) SFlow
Synchronization, IEEE1588	Support IEEE1588v2 transparent clock
Other Features	DNS Client DHCP Relay DHCP Client DHCP Snooping DHCP Option 66 DHCP Option 67 DHCP Option 82 NTP/SNTP Client UPNP UDLD

PoE management	Total PoE power budget control Per port PoE function enable/disable PoE admin-mode control PoE port power feeding priority Per PoE port power limitation PD classification detection PD alive check PoE schedule Soft-reboot PoE Non-stop
Maintenance	Cable Diagnostics Ping SFP DDM (Digital Diagnostics Monitoring) Thermal protection System log (Local and Remote) Memory and CPU Monitoring

Layer 3 functions:

Static Routing	IPv4 Unicast: Static Routing(Software Base) IPv6 Unicast: Static Routing(Software Base)
IPV6	IPv6 neighbor discovery (ND) Path maximum transmission unit (MTU) discovery Internet Control Message Protocol (ICMP) version 6 TCPv6/UDPv6 Ping6 Telnet(v6) Http/Https Interface IPV6 ACL IPV6

Solution Diagram: