

48-Port Gigabit SFP+ 4-Port 10G SFP+ L3 Managed Ethernet Switch

Overview

The switch is 48-Port Gigabit SFP+ 4-Port 10G SFP+ L3 Managed Ethernet Switch. It is full fiber stackable routing switch with fixed, built-in 10GbE uplink ports. The fully managed switch provides high availability, scalability, security, energy efficiency, and easy operation with rich L3 features. It is ideal for aggregation or access layer for campus, enterprise, government and service provider networks, deployed as Access switch with 10G uplink in FTTH network.

Features and Highlights

Performance and Scalability

- With high switching capacity, it supports wire-speed L2/L3 forwarding and high routing performance for IPv4 and IPv6 protocols.
- The 10 Gigabit Ethernet connectivity of the switch is accomplished via a hot-pluggable 10 Gigabit SFP+ transceiver which supports distance up to 300 meters over multimode fiber and 10 to 40km over single-mode fiber (The distance depends on the optical module chosen).



VSF (Virtual Switch Framework)

- Virtual Switch Framework can virtualize multiple switches into one logical device, achieving the sharing of information and data tables between different switches. The performance and ports density of the virtualized device is greatly enlarged by times under VSF. VSF also simplifies management work for the network administrator and provides more reliability.

Rich L3 Features

- The switch delivers high-performance, hardware-based IP routing. RIP, OSPF, and BGP provide dynamic routing by exchanging routing information with other Layer 3 switches and routers. With the switch, customers could easily achieve Policy-based Route (PBR), which is important when they need a multi exit application.

Strong Multicast

- Supports abundant multicast features. In Layer 2, such as IGMP v1/v2/v3 snooping and fast leave. L3 multicast protocols such as IGMP v1/v2/v3. With Multicast VLAN Register (MVR), multicast re-ceiver/sender control and illegal multicast source detect functions. It provides a great application experience for the customer.

High-Reliability network

- MRPP is a Multi-layer Ring Protection Protocol, which is UETPO's private fast Ethernet ring protocol. Comparing to spanning tree protocol, it has the advantages of fast convergence, simple protocol calculation, fewer system resources cost, and so on, which can improve the reliability of Ethernet network operation.

Comprehensive QoS

- With 8 queues per port, the switch enable differentiated management of up to 8 traffic types. The traffic is prioritized according to IEEE 802.1p, DSCP, IP precedence, and TCP/UDP port number, giving optimal performance to real-time applications such as voice and video.
- It also supports Bidirectional rate limiting, per port or traffic class preserves network bandwidth, and allows full control of network resources.

Abundant IPv6 Support

- Supports IPv6 switching and routing based on hardware for maximum performance. With increased network devices growing the need for larger addressing and higher security become critical, It will be the right product to meet this requirement.

Specifications

Items	UTP5650GS-L3
Physical Ports	
Downlink Ports	48*100/1000 Base-X SFP
Uplink Ports	4*10GbE SFP+
Management Ports	1*Console port 1*RJ-45 Ethernet management port 1*USB 2.0 Interface
Switch Property	
Switching Capacity	176Gbps
Packet Forwarding Rate	131Mpps
Jumbo Frame	10kB
MAC Table	16k
ARP Table	4k
Routing Table	1k
ACL Table	1k
Physical Parameter	
Input Voltage	AC: 100~240V AC, 50~60Hz + 12V DC RPS
Power Consumption	≤60W
Operating Temperature	0°C~50°C
Storage Temperature	-40°C~70°C
Operating Humidity	5%~95% (Non-condensation)
Fan	Support automatic speed adjustment
Dimensions (W*D*H)	440mm*320mm*44mm
Net Weight	< 6kg
Software Specifications	
L1, L2 Features	IEEE 802.3 (10 Base-T), IEEE 802.3u (100 Base-TX), IEEE 802.3z (1000 BASE-X), IEEE 802.3ab (1000 Base-T), IEEE 802.3ae (10G Base), IEEE 802.3x, IEEE 802.3ak (10G BASE-CX4)
	Port loopback detection LLDP and LLDP-MED UDLD IEEE 802.3ad LACP, max 128 group trunks with max 8 ports for each trunk LACP load balance ERPS (G.8032)
	N:1 Port Mirroring RSPAN
	IEEE 802.1d (STP) IEEE 802.1w (RSTP) IEEE 802.1s (MSTP) Root Guard BPDU Guard BPDU Tunnel
	802.1Q, 4K VLAN MAC VLAN, Voice VLAN, PVLAN, Protocol VLAN, Multicast VLAN QinQ, Flexible QinQ GVRP N:1 VLAN Translation Broadcast / Multicast / Unicast Storm Control
	IGMP v1/v2/v3 Snooping and L2 Query ND Snooping MLDv1/v2 Snooping
	Port Security
	Flow Control: HOL, IEEE 802.3x Bandwidth Control

Specifications

Items	UTP5650GS-L3
Software Specifications	
L3 Features	Static Routing, RIP v1/v2, OSPF v2, BGP4 OSPF v3, BGP4+ OSPF multiple processes LPM Routing Policy-based routing (PBR) for IPv4 and IPv6 VRRP URPF ECMP BFD
	IGMP v1/v2/v3, IGMP Proxy, Static Multicast Route Multicast Receive Control Illegal Multicast Source Detect
	ARP Guard, Local ARP proxy, Proxy ARP, ARP Binding, Gratuitous ARP, ARP Limit Anti ARP Cheat, Anti ARP Scan
	DNS Client, DNS Relay
	GRE Tunnel
IPv6	6to4 Tunnel, Configured Tunnel, ISATAP Tunnel, GRE Tunnel ICMP v6, ND, DNS v6 IPv6 LPM Routing, IPv6 Policy-based Routing (PBR) IPv6 VRRP v3, IPv6 URPF, IPv6 RA RIPng, OSPF v3, BGP4+ MLD Snooping, IPv6 Multicast VLAN MLDv1/v2, IPv6 Anycast RP, IPv6 ACL, IPv6 QoS
QoS	8 Queues SWRR, SP, WRR, WDRR, SWDRR Traffic Classification Based on 802.1p COS, ToS, DiffServ DSCP, ACL, port number Traffic Policing PRI Mark/Remark
ACL	IP ACL, MAC ACL, IP-MAC ACL Standard and Expanded ACL based on source/destination IP or MAC, IP Protocol, TCP/UDP port, DSCP, ToS, IP Precedence), VLAN, Tag/Untag, CoS Redirect and statistics Rules can be configured to port, VLAN, VLAN routing interfaces Time Ranged ACL
Security	802.1x AAA Port, MAC-based authentication Accounting based on time length and traffic Guest VLAN and auto VLAN
	RADIUS for IPv4 and Ipv6
	TACACS+ for IPv4 and Ipv6 MAB
DHCP v4/v6 Traffic Monitor	DHCP Server/Client for IPv4/IPv6 DHCP Relay/Option 82 DHCP Snooping/Option 82
Traffic Monitor	sFlow Traffic Analysis
Security Network Management	CLI, WEB, Telnet, SNMP v1/v2c/v3 through IPv4 and IPv6 Syslog and external Syslog Server HTTP SSL SNMP MIB, SNMP TRAP FTP/TFTP SNTP/NTP RMOM 1,2,3,9 Authentication by Radius/TACACS SSH v1/v2 Dual firmware images/ Configuration files 802.3ah OAM, 802.1ag OAM
Data Center Features	VSF (Virtual Switch Framework)

More Information

For more information, please visit:

www.utepo.net

SHENZHEN UTEPO TECH LTD.

Head quarter: 5F, Building B, Tiange Science and Technology Park, NO.2, Luozu Industrial Avenue, Shi'yan Street, Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-83898016-863 or +86-1501-2669-765 (Sales)

Email: info@utepo.net (Sales), support@utepo.net (Technical support)

©2021 SHENZHEN UTEPO TECH LTD. All Rights Reserved.

Version,V1.0, updated 2021.1.20.

The information in this document is subject to change without notice.

Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.