Foredge

48-Port 2.5G High Speed L3 Managed Ethernet Switch

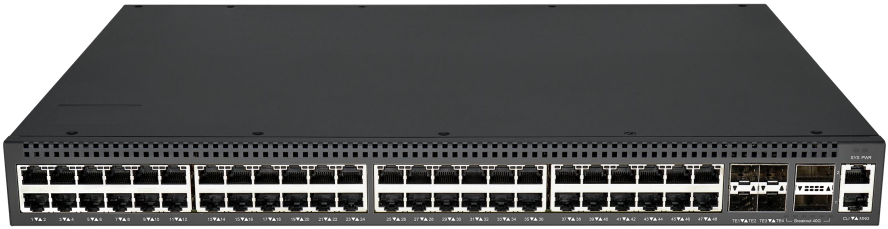
S6700-48GX-4TF-2QF+

Product Brochure

Shenzhen Fengrunda Technology Co., Ltd

Product Introduction:

S6700-48GX-4TF-2QF+ is a multi-gigabit Ethernet switch oriented for the next-generation IP metropolitan area network, large campus network, and enterprise network.It adopts the cutting edge hardware architecture and is equipped with the operating system of HoRed's independent intellectual property rights.On the basis of providing high-performance L2/L3/L4 wire-speed switching services, S6700-48GX-4TF-2QF+ further integrates various network services such as IPv6 and network security. It has a variety of product specifications, supporting 48 2.5G access, 10G/40G high-speed uplink ports.It is widely used in high-end cyber cafes, E-sports hotels, and high-speed enterprise network.



Main Features:

Doubled performance

• The virtualized system makes full use of every link between physical devices,avoiding the link congestion of the traditional networking model Spanning Tree Protocol, making the best use of devices, doubling the performance, and protecting the original link investment to the greatest extent.

High reliability

• Based on advanced distributed processing technology, the efficient cross-physical device link aggregation function separates the logical control plane, service control plane and service data plane,providing uninterrupted Layer 3 routing and forwarding and avoiding business interruption caused by the single failure. Therefore, the reliability of the virtual system is greatly improved.

Easy management

• The entire virtual system realizes unified management of a single IP, and physical devices are visible to users, which simplifies the management of network devices and network topology, greatly improves operation efficiency, and effectively reduces operation and maintenance costs.

Carrier-level high reliability

• Based on Hitless Protection System (HPS), the key components of the S6700-48GX-4TF-2QF+, such as power supply modules, are redundant backup and hot-swappable, which supports seamless switchover in case of failure without manual intervention.
• Supports STP/RSTP/MSTP, VRRP, ring network protection, dual uplink active/standby link protection, LACP and other simple and efficient redundancy protection mechanisms.
• Supports In-Service Software Upgrade (ISSU), ensuring the unremitting data forwarding during system upgrade.
• The ultra-high-precision BFD mechanism, through linkage with Layer 2 and Layer 3 protocols, realizes millisecond- level fault detection and service recovery, which greatly improves the reliability of the network system.

• Perfect Ethernet OAM mechanism, supporting 802.3ah and 802.1ag, realizes rapid detection and location of faults through real-time monitoring of network operation status.
• The high reliability hardware and software of the S6700-48GX-4TF-2QF+ meet the fault recovery time requirement of 50ms for carrier-level services, and truly achieve the high reliability (99.999%) of carrier-class core devices.

Innovative HVSS

• supports innovative HoRed Virtual Switch System (HVSS), which can virtualize multiple physical devices into one logical device with unparalleled performance, reliability, and management compared to stand-alone physical devices.

Specifications:

Hardware Specification:	
Network Interface	● 48*1000M/2.5Gbps RJ45 ports ● 4*10G SFP+ ports ● 2*40G QSFP+ ports ● 1*Console port
Power Consumption	● Less than 100W
Performance	● Bandwith：480Gbps ● Packet forwarding rate：360Mpps ● MAC table size：128K ● Port buffer：4.5MB ● Flash：4GB ● DRAM：2GB ● Forwarding type：storage forwarding
Jumbo Frame	● 16K
Power Supplier	● Power input：AC 100-240V/50-60Hz
Dimension	● WxDxH：440mmx180mmx44mm
Evironment	● Operating temperature：0°C~50°C ● Storage temperature：-40℃∽70℃ ● Operating humidity：10%~ 90% RH non condensing ●Storage humidity：5%∽90% RH non condensing
Safty Regulations	● CE/ROHS/FCC

Software Specifications:	
Multicast	● IGMP v1/v2c/v3 ● IGMP Snooping ● IGMP fast leaving ● Multicast group policy and multicast number limit ● Multicast filtering ● MVR ● IGMP snooping in certain port and VLAN ● PIM-DM/SM/SSM
IPv4	● Static routing, RIP v1/v2, OSPF, BGP ● Policy Based Routing(PBR) ● ECMP ● BFD for static routing, RIP, OSPF, BGP
IPv6	● IPv4/v6 dual stack ● ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet ● Ipv6 neighbor discovery ● Path MTU discovery ● MLDV1 ● IPv6 Static Routing, RIPng, OSPFv3, BGP4+ ● Manual tunnel, ISATAP tunnel, 6-to-4 tunnel
DHCP	● DHCP server, client, relay, snooping
MPLS	● MCE
QoS	● Traffic classification of port/L2~4 protocol headers/VLAN/CoS/DSCP ● Multiple queuing algorithms such as SP,802.1P/DSCP priority mapping and remark ● CAR traffic control ● WRR or SP+WRR,Tail-Drop, WRED ● Traffic supervision and traffic shaping ● 8 queues per port

Software Specifications:	
Security	● DDoS attack prevention, TCP-SYN/UDP/ARP Flood attack prevention ● IEEE 802.1x authentication, multiple-user authentication, guest vlan ● L2~L4 ACL ● Anti-DOS/IP spoofing/TCP/ping/SYN/ICMP flood attacks ● Broadcast/multicast/unknown-unicast storm-control ● Port isolation ● Port Security, MAC address limitation,IP+MAC+port binding ● DHCP Snooping, DHCP Option 82 ● DAI(Dynamic ARP Inspection) ● IPSG(IP Source Guard) ● IEEE 802.1x certification ● AAA ● Radius,Tacacs+ ● Multiple user privileges
Reliability	● 802.3ad Static/LACP link aggregation, ● EAPS ● G.8032 ERPS ● ISSU ● VRRP ● GR for OSPF and BGP ● BFD for OSPF and BGP ● HVSS virtual stacking system
Management	● CLI: Console, Telnet, SSHv1/2 ● Web-GUI: HTTP, HTTPS/SSL ● SNMP v1/v2c/v3, RMON,SNMP alarm/inform/traps ● Upload and download of FTP/TFTP/SFTP files ● Debugging ● Syslog for alarm/notification/command/debug ● NTP ● SPAN, RSPAN (1:1 and N:1 mirror)

Management	● LLDP, LLDP-MED ● sFlow ● ZTP(Zero Touch Provisioning) ● Optical DDM ● Ethernet cable diagnosis ● 802.3ah, 802.1ag