

Foreedge

**100G Uplink 48-Port 2.5G L3
Managed PoE Switch
(Based on SONIC)**

S6700-48GXP-4TF-2QF

Product Brochure

Product introduction

S6700-48GXP-4TF-2QF is a three-layer managed POE switch designed specifically for security transmission and WIFI coverage. The maximum power of a single port meets the 90W BT standard and can meet the POE power supply needs of various types of devices such as WIFI AP&bridge, IP camera, IP phone, etc. The product adopts a new generation of high-performance hardware and is equipped with the operating system of SONiC(Software for Open Networking in the Cloud) which is an open-source network operating system, aiming to provide a highly available, scalable, and easy to manage network architecture for cloud computing and data centers. It provides cost-effective 2.5G access and 100 Gigabit uplink ports. It supports three-layer routing protocols, complete security protection mechanisms, comprehensive ACL/QoS policies, and rich VLAN functions, making it easy to manage and maintain, meeting users' networking needs for easy management, high security, and high-density network equipment. It is an ideal choice for various commercial network applications.



Specifications

Hardware Specifications	
Network Interface	<ul style="list-style-type: none"> ● 48 * 1000M/2.5G RJ45 port ● 4 * 10G SFP+ fiber port ● 2 * 100G QSFP28 fiber port ● 1 Console port,1 Management Port
Network protocol	<ul style="list-style-type: none"> ● 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, IEEE 802.3 af, IEEE 802.3 at, IEEE 802.3 bt
Performance Specifications	<ul style="list-style-type: none"> ● bandwidth: 880Gbps ● Packet forwarding rate: 540Mpps ● MAC address: 96K ● port cache: 9Mb ● DRAM: 2GB ● Flash: 4GB ● Forwarding mode: store and forward
LED indicator	<ul style="list-style-type: none"> ● 48 * 1000M/2.5G Link/Act indicator, PoE indicator ● 4 * 10G SFP+ Link/Act indicator ● 2 * 100G QSFP28 Link/Act indicator ● 2 Power indicator ● 1 SYS indicator
Power	<ul style="list-style-type: none"> ● Input: AC 100-240V/50-60Hz ● PoE budget: 1200W ● Support single port Max. 90W ● Dual power redundant input
Dimensions (LxWxH):	<ul style="list-style-type: none"> ● 440mm×320mm×44mm
Environmental Specifications	<ul style="list-style-type: none"> ● Operating temperature: 0°C~40°C ● Storage temperature: -40°C~70°C ● Working humidity: 10%~90% RH non condensing ● Storage humidity: 5%~90% RH non condensing
Safety regulations	<ul style="list-style-type: none"> ● CE/ROHS/FCC

Software Specifications:

Based on Foredge Networking Operation System (RunOS)

Protocol standard	<p>IEEE 802.3:Ethernet media access control (MAC)</p> <p>IEEE 802.3i:10BASE-T Ethernet</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 fiber)</p> <p>IEEE 802.3ad:standard method of link aggregation</p> <p>IEEE 802.3x:flow control</p> <p>IEEE 802.1p:LAN layer 2 qos/cos protocol related to traffic priority (multicast filtering function)</p> <p>IEEE 802.1q:VLANBridge operation</p> <p>IEEE 802.1d:STP Spanning tree</p> <p>IEEE 802.1s:MSTP Spanning tree</p> <p>IEEE 802.1w:RSTP Spanning tree</p>
Layer3 interface	<p>Support Layer3 interface</p> <p>Support IPv4 and IPv6 address configuration</p> <p>Support ARP configuration</p> <p>Support ND configuration</p>
Layer 3 routing	<p>Support IPv4 static routing</p> <p>Support IPv4 dynamic routing RIP v1/v2</p> <p>Support IPv4 dynamic routing OSPFv2</p> <p>Support IPv6 static routing</p> <p>Support IPv6 dynamic routing RIPng</p> <p>Support IPv6 dynamic routing OSPFv3</p>

Software Specifications:	
Based on Foredge Networking Operation System (RunOS)	
VLAN	Support 4K VLAN Support 802.1Q VLAN、MAC VLAN ,IP VLAN , Voice VLAN
DHCP	Support DHCP server Support DHCP relay Support DHCP Snooping
MAC address table	Comply IEEE 802.1d standard Support MAC address automatic learning and aging Support static, dynamic and filtered address tables
Safety features	Password protection Support restricting user access based on port number, IP address and 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 certification、 AAA Support Port security, port isolation Support CPU Protection function
Access control(ACL)	Support L2(Layer 2) ~ L4(Layer 4) packet filtering function Support Port mirroring, flow speed restriction, QoS re marking
QoS	Support 8 port queues Support port priority, 802.1p priority, DSCP priority Support SP、 WRR、 SP+WRR、 WFQ priority scheduling
Spanning tree	Support STP(IEEE 802.1d) , RSTP(IEEE 802.1w) and MSTP(IEEE 802.1s) standard Support Loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering Support optical port 50ms switching

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Multicast	Support IGMP v1/v2/v3 Snooping Support MLD v1/v2 Snooping Support Fast leave mechanism and querier of layer 2 multicast Support Layer 2 IPv4 static multicast Support Layer 2 IPv6 static multicast Support IGMP v1/v2/v3 layer 3 multicast
Storm suppression	Support Multicast suppression Support Broadcast suppression Support Unknown unicast suppression
Link convergence	Support Static convergence Support Dynamic convergence Support based on IP, MAC and mixed load balancing mode Support 32 aggregation groups at most
IPv6	Support IPv6 Ping、 IPv6 Tracert、 IPv6 Telnet Support IPv6 SSH 、 IPv6 SSL
Network management	Support SONIC Operation system 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, classification warning Support Ping、 Tracert Detection, cable detection Support Apollo cloud platform one-stop management and maintenance