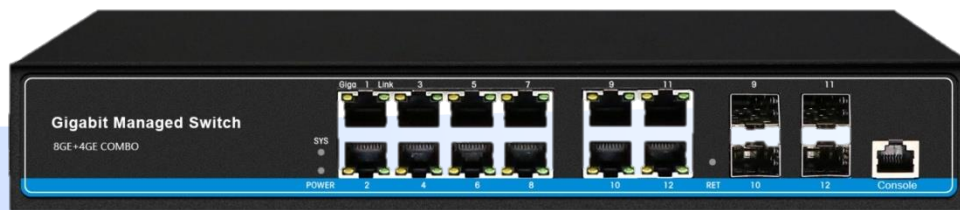# 12-port
Managed Gigabit Switch
FS1248G

Introductions

FS1248G is a fully Gigabit L2 network management switch designed and developed solely for the purpose of building high-performance gigabit network requirements. 8 Gigabit RJ45 ports and 4 separate Gigabit SFP/TX combo (Mini GBIC), Provide a comprehensive security protection system, Perfect QoS strategy and rich VLAN function，Management and maintenance are simple and can be applied to small and medium enterprises, Core layer of community and school.

Key Features

- Comprehensive security protection system to ensure long-term stable operation of the network

- Rich QoS strategy and ACL access control function, multi service, efficient integration operation

- Port convergence and spanning tree protocol improve the ability of link redundancy backup

- Provide secure, flexible ways of providing Web, network management, CLI command line, SNMP, etc.

- Provide network diagnosis, cable inspection, system logs and other functions.

Full Gigabit access

Provides 8* 10/100/1000M adaptive RJ45 port, all the ports have the line speed forwarding capacity; provide 4*GE/SFP combo uplink ports, fully protect user investment, convenient and flexible.

Comprehensive safety protection system

Simple operation, simplifying the management of network; combination of ARP attack protection function, completely solve the network ARP spoofing attacks; support port security, can limit the number of port MAC address, MAC address effective defense attack; support DoS attack protection, effectively guarantee the network security.

Powerful VLAN capabilities

IEEE, 802.1Q, VLAN, meet the needs of different users, make the network more convenient, efficient and safe.

Rich QoS strategy

3 priority modes based on port, IEEE802.1p and DSCP to guarantee the priority processing of key business data; support traffic control function and can reasonably allocate bandwidth.

Multilevel access control policy

Powerful hardware ACL capacity, support L2/L4 data stream classification; easy network monitoring, traffic regulation, priority weight markers and data forwarding control; support time based ACL control, easy to realize the time accurate access control needs; support port and MAC 802.1x based authentication based on user access, easy setup.

Reliability design

STP/RSTP/MSTP two layer link protection technology, greatly improve the ability of fault tolerance, redundancy link, to ensure stable operation of the network; provide static convergence and dynamic aggregation of two kinds of convergence pattern, effectively increase the link bandwidth, improve link reliability, while achieving load balancing, link backup; support multicast management, through the IGMP

Snooping technology, effective inhibition of multicast overload caused by network congestion.

Secure network management and maintenance

CLI command line (Console, Telnet), Web network, SNMP (V1/V2c/V3, SSH (V1/V2) and other management methods, to achieve fast and convenient network management; support user identity classification, filtering and other functions, enhanced security configuration; support port data monitoring, real-time monitoring of network status, to easily achieve the global unified management of the network, convenient flexible.

Advanced watchdog Technology

System integration against false halt system, when the system resources exhausted or the system suspended tasks and other unexpected circumstances, the system will automatically restart, to ensure reliable operation of the network.

Technical Specifications

Hardware	
Interface Port	8*10/100/1000M UTP 4*GE/GIGA UTP/SFP Combo
Management Port	1*Console
Reset KEY	1
Bandwidth	24Gbps
Packet Forwarding	17.28Mpps
CPU	500MHz
RAM	128M
MAC	8K
Buffer	4.1M
FLASH	16M
Transmission	Store and forward
Working Temperature	0°C~50°C
Storage Temperature	-40°C~70°C
Operating Humidity	10%~90% Non-coagulation
Storage Humidity	5%~95% Non-coagulation

Product Size	295 x 195 x 45 mm
Weight	1.8kg
Power Input	AC 100-240V 50-60Hz
Power Consumption	≤ 15W

WEB Software function	
Standards	IEEE 802.3x IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z IEEE 802.3ad IEEE 802.3q, IEEE 802.3q/p IEEE 802.1w, IEEE 802.1d, IEEE 802.1S
MAC Address	8K MAC address; MAC address learning and aging
VLAN	4K VLANs; Port-based VLANs; 802.1Q VLAN
Spanning Tree	STP(Spanning Tree Protocol) RSTP/MSTP(Rapid Spanning Tree Protocol/Multiple Spanning Tree Protocol) ERPS ring network protocol EAPS ring network protocol 802.1x argumentation agreement
Link Aggregation	Max 8 aggregation groups, each support 8 ports, Static aggregation and dynamic aggregation
Port Mirror	Many-to-one port mirroring
Loop Guard	Loop protection function, real-time detection, rapid alarm, accurate positioning, intelligent blocking, automatic recovery
Isolation	Support downlink ports isolated from each other and communicate with upstream port
Port Flow Control	Half duplex based back pressure control Full duplex based on PAUSE frames
Line Rate	Support port-based input / output bandwidth management
IGMP Snooping	IGMPv1/2/3 MLDv1/2 Snooping GMRP protocol registration Multicast address management, multicast VLAN, multicast routing ports, static multicast address
DHCP	DHCP Snooping
Storm Suppression	Unknown unicast, multicast, unknown multicast, storm suppression of

	broadcast type Storm suppression based on bandwidth tuning and storm filtering
Security	User port + IP address + MAC ACL based on IP and MAC Security properties of port-based MAC address quantities
QoS	802.1p port queue priority algorithm Cos/ Tos, QoS sign WRR(Weighted Round Robin), Weighted priority rotation algorithm WRR, SP, WFQ, 3 priority scheduling models
Port	Auto-MDIX; Auto negotiation
System maintenance	Upgrade package upload; System log view; WEB restore factory configuration
Management and maintenance	WEB NMS Remote configuration and maintenance using Telnet SNMP v1/v2/v3; SSHv1/v2; RMON