

Manual for F1200W-9S-2G

Optical fiber convergence managed switch

Product overview

S1200W-9S-2G has 11 ports full gigabit enterprise level multi-functional L2 network management switch independently developed by hasivo. It is specially designed for enterprise customers to optimize and enhance the design and has higher reliability. The device adopts Realtek new generation high-performance platform and hasivo 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 9 Gigabit SFP ports
- ◆ Provide 2*10/100/1000M RJ45 uplink ports.
- ◆ 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.

Fiber Transmission

- ◆ Flexible networking, single fiber, double fiber, single mode, multi-mode and other different optical fiber modules can be configured on demand to adapt to different interface equipment.
- ◆ The maximum transmission distance of single-mode single fiber is 100km.
- ◆ The maximum transmission distance of single mode dual fiber is 100km.
- ◆ The maximum transmission distance of multimode dual fiber is 850m/2km.

Functional features

- ◆ Add a variety of new applications based on IPv6, easily adapt to modern complex network management applications
- ◆ Support IEEE 802.1Q VLAN, users can divide VLAN flexibly 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 call quality.
- ◆ It supports QoS, supports port based, 802.1p and DSCP based priority modes to optimize the bandwidth configuration.
- ◆ It supports ACL, achieves packet filtering by configuring matching rules, processing operations and time permissions, and provides flexible security access control policies
- ◆ Support IGMP V1 / V2 multicast protocol, support IGMP snooping, meet the requirements of multi terminal HD video monitoring and video conference access.
- ◆ Support multicast VLAN, multicast filtering, efficient data transmission, save network bandwidth, reduce network load.
- ◆ Support port monitoring, copy the data package of monitored port to the monitoring port to realize network monitoring.
- ◆ Support the management and maintenance of equipment through web interface.
- ◆ It supports port convergence, effectively increases link bandwidth, realizes link backup and improves link reliability.

Security & Protection

- ◆ STP / RSTP / MSTP spanning tree protocol is supported to eliminate layer-2 loops and realize link backup.
- ◆ Support tree security function, prevent devices in tree network from being attacked by various forms of malicious.
- ◆ It supports static aggregation and dynamic aggregation, effectively increases link bandwidth, realizes load balancing, link backup, and improves link reliability.

Running and Maintenance

- ◆ Support web management, CLI command line (console, telnet), SNMP (v1/v2/v3) and other diversified management and maintenance methods.
- ◆ It supports HTTPS, SSL V3, tlsv1, sshv1/v2 and other encryption methods, and makes management more secure.
- ◆ It supports RMON, system log and port traffic statistics to facilitate network optimization and transformation.
- ◆ Users can know the working status of the switch through the power indicator (PWR), port status indicator and system status indicator (sys).

02 Spare parts list



Switch



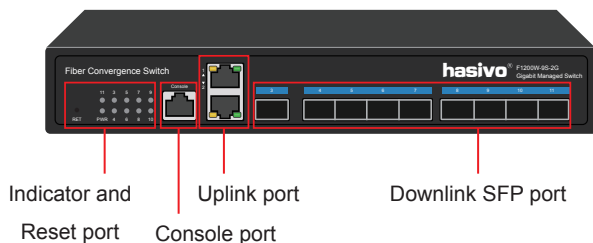
DC adapter



User manual+Warranty Card

03 Product display

Front



Back



Indicator definition:

Indicator		Status	Description
Power indicator: PWR		Green light is always on	Power on normal
		Always off	No power
SFP indicator: 3~11		Light is on	The corresponding port has data transmission
Network indicator	Green	Light is flashing	The corresponding port works at 10/100M speed
	Orange	Light is flashing	The corresponding port works at 1000M speed

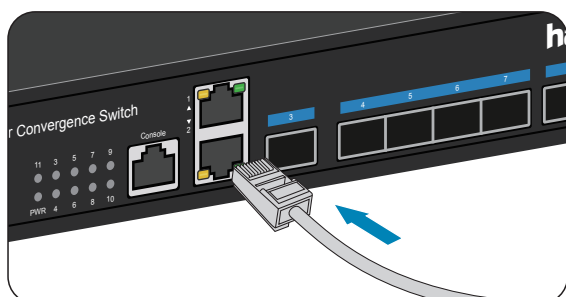
04 Installation&Points of attention

Checking before installation

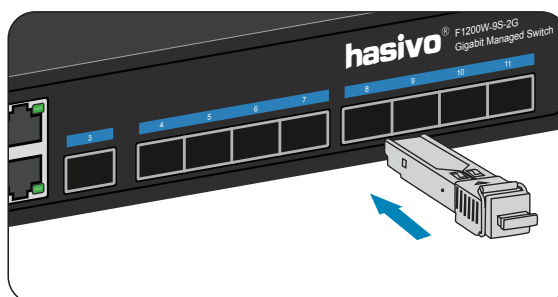
- 1.Check whether the accessories are complete. If there is any omission, please contact us.
- 2.Check whether the power supply voltage is consistent with the working voltage of the switch,so as to avoid the equipment burning out due to high voltage.
- 3.Ensure that the installation position of the switch has certain ventilation and heat dissipation conditions.
- 4.Please keep the power off during installation to avoid potential safety hazards.
- 5.Please install the switch on a stable plane to avoid falling and damage.

Port installation and connection

➤➤➤ Insert the data cable



➤➤➤ Install the SFP module

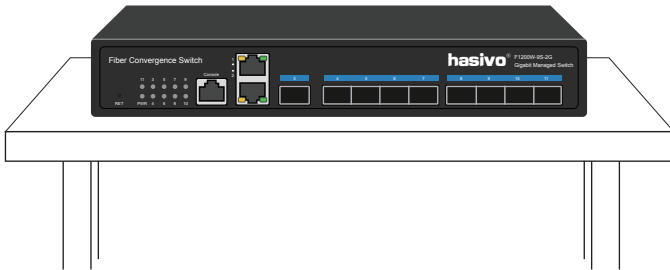


As shown in the figure, insert the crystal head of the data cable into the network port. When you hear a clear click, it indicates that the crystal head is successfully connected with the network port of the switch. Just plug in all the network cables of the network equipment in this way.

As shown in the figure, align the optical fiber module with the optical port of the SFP and insert it smoothly. When you hear a clear click, it indicates that the optical fiber module is installed successfully. Just install the two optical fiber modules in this way.

Install to desktop

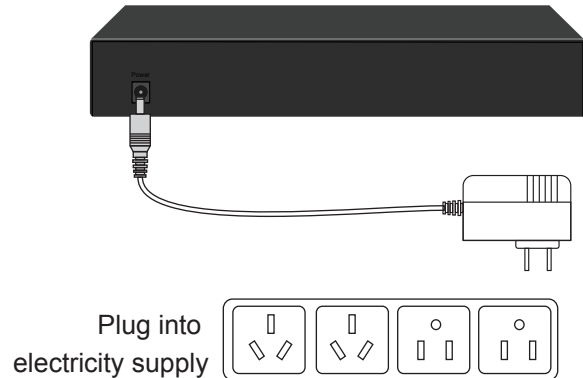
➤➤➤ Place the switch on the desktop



The switch should be placed on a well ventilated horizontal desktop, which is conducive to better heat dissipation of the equipment

Power on

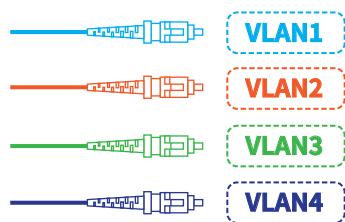
➤➤➤ Connected the power



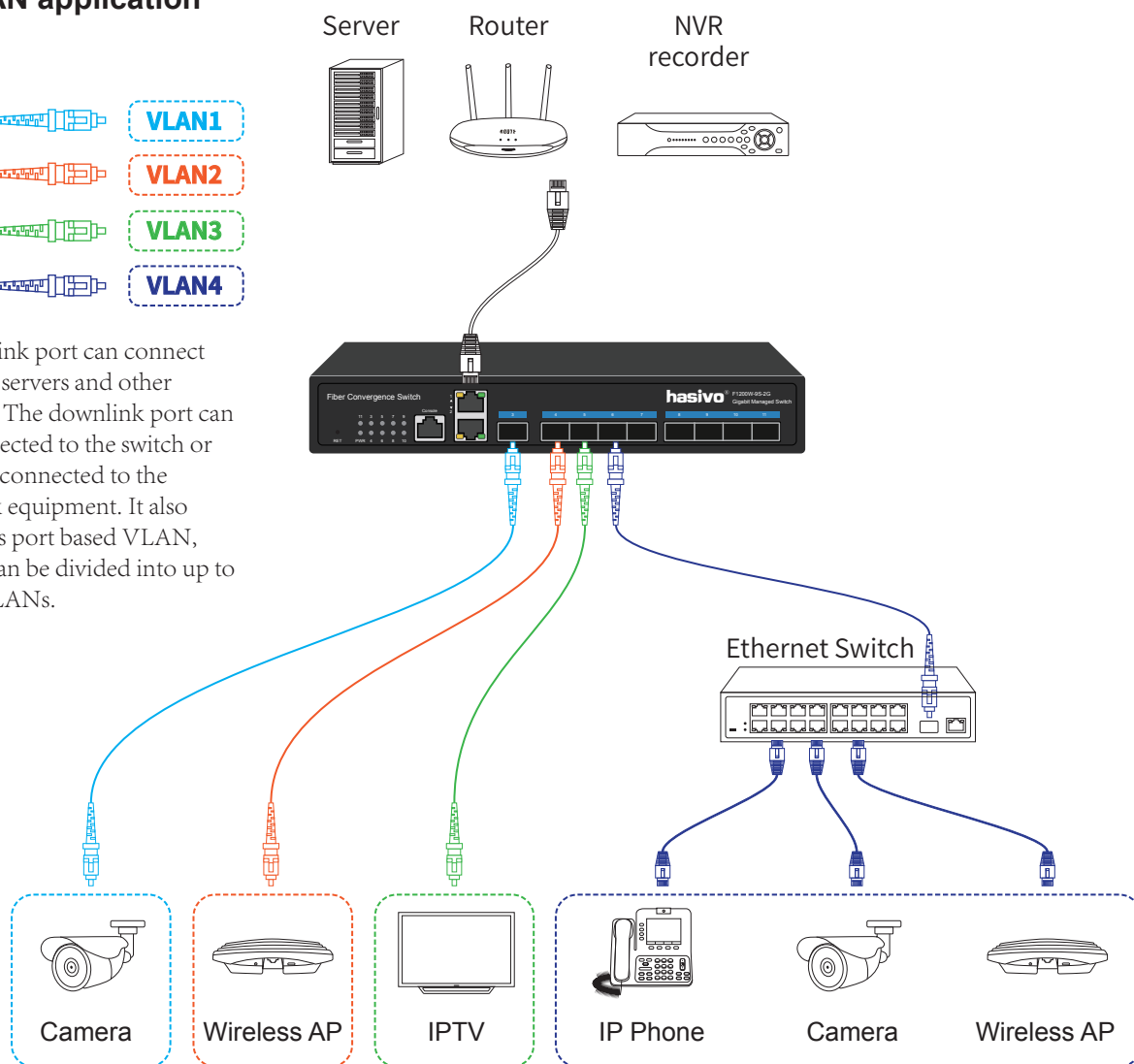
Points of attention

1. Do not stack heavy objects on the switch to avoid danger.
2. In order to avoid the risk of electric shock, please do not open the machine box when the switch is working, even if it is not powered on, please contact us in case of any problem.
3. Before cleaning the switch, pull out the power plug of the switch. Do not wipe it with wet fabric or clean it with liquid.
4. If the power adapter is damaged, do not replace it with other power adapters. This switch should be equipped with original power adapter.

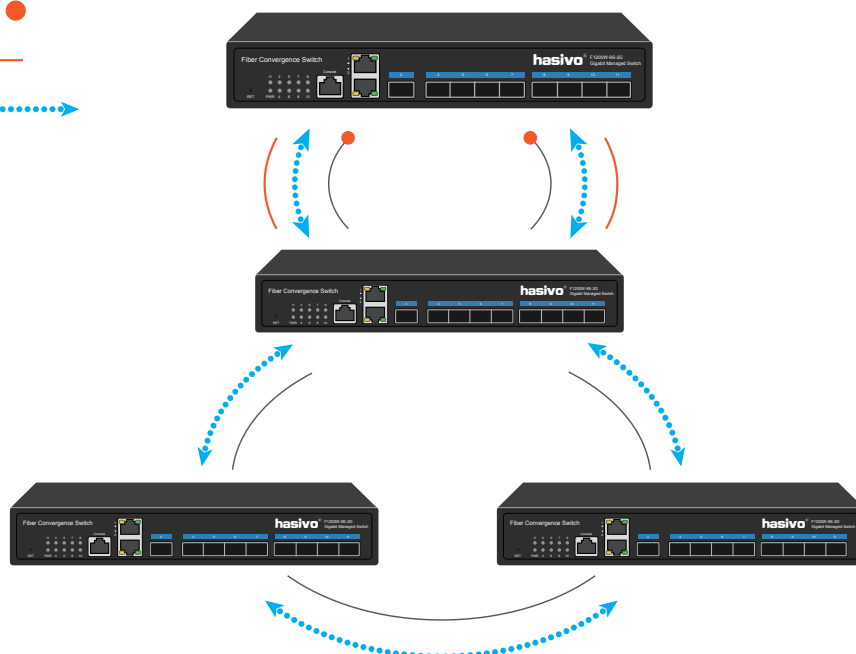
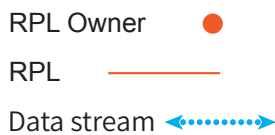
VLAN application



The uplink port can connect routers, servers and other devices. The downlink port can be connected to the switch or directly connected to the network equipment. It also supports port based VLAN, which can be divided into up to 4096 VLANs.



Application of ring network



06 Common troubleshooting

- ⚠ *The PWR indicator is not on after the power is connected → Check whether the power adapter and plug are connected correctly, whether the power cord is damaged, and whether the power adapter is damaged.*
- ⚠ *Switch cannot communicate after power up → Check whether the switch indicator is on. If the indicator is off, the network cable is not connected. If the indicator is on, the communication fault is indicated.*
- ⚠ *Switch network speed suddenly become very slow → Take off the plug and restart the switch.*

[If the above problems or other switch problems can not be solved, please contact us for technical support]

07 Product Parameter

Model	F1200W-9S-2G
Product	Full Gigabit 9SFP+2GE L2+ Optical Convergence Managed Switch
Fixed Port	9*1000M SFP 2*10/100/1000Base-TX RJ45 port (Data)
Console port	1*console port
Reset Key	1
Network Protocol	IEEE 802.3 IEEE 802.3u 100BASE-TX IEEE 802.3ab1000BASE-T IEEE 802.3x IEEE 802.3ad IEEE 802.3q 、 IEEE 802.3q/p IEEE 802.1w、 IEEE 802.1d 、 IEEE 802.1S STP(Spanning Tree Protocol) RSTP/MSTP(Rapid Spanning Tree Protocol) EPPS ring network protocol EAPS ring network protocol
Bandwidth	56/128Gbps
Packet Forwarding	41.67Mpps
MAC Address	8K
Buffer	4.1M
Transmission Distance	10BASE-T : Cat3,4,5 UTP(≤250 meter) 100BASE-TX : Cat5 or later UTP(≤100 meter) 1000BASE-TX : Cat6 or later UTP(≤1000 meter) 1000BASE-SX:62.5μm/50μm MMF(2m~550m) 1000BASE-LX:62.5μm/50μm MM(2m~550m) or 10μm SMF(2m~5000m)
FLASH	128M
RAM	128M
CPU	500MHz
DDR	1G DDR3
LED Indicator	PWR: Power LED 3~11:(SFP LED) Port:(Green_10/100M LED;Orange_1000M LED)
Power	External power supply: DC: 12V 2A, max 24W (100-240Vac 50/60Hz 0.3A)
Operating Temperature/Humidity	-10~+55°C; 5%~90% RH Non coagulation
Storage Temperature/Humidity	-40~+75°C; 5%~95% RH Non coagulation
Product size/ package size (L*W*H)	245mm*108mm*40mm 298mm*205mm*55mm
N.W/G.W (kg)	0.7kg/1kg
Installation	Desktop

Lightning protection / protection level	6KV 8/20us; IP30
Certificate	3C; CE-EMC EN55032; CE-LVD EN62368; FCC Part 15 Class B; RoHS;
Warranty	Whole device for 1 year(Accessories not included)

Software Function

The followings are main functions not included in all the functions. Please contact with us for more other information! (We support software development for customization requirement)

Network Protocol	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、IEEE 802.1X
MAC	Support 16K MAC address, auto aging and learning
VLAN Configuration	Support port-based VLAN Up to 4096 VLANs Support Voice VLAN, can configure Qos for voice data 802.1Q
Spanning Tree	STP(Spanning tree protocol) RSTP(Rapid spanning tree protocol) MSTP(Rapid spanning tree protocol) EPPS(Ring network protocol) EAPS(Ring network protocol) 802.1x
Port Aggregation	Support 8 groups of aggregation, each group support up to 8 ports
Port Mirroring	Support many-to-one port mirroring
Loop Guard	Support loop protection, real-time detection, quick alarm, concise location, Intelligent blocking, automatic recovery
Port Isolation	Support downlink ports isolate from each other and communicate with uplink port as well
Flow Control	Half duplex based on Back pressure; Full duplex based on PAUSE frame
Speed Limitation	Bandwidth management based on port input and output
Multicast Control	IGMPv1/2/3 and MLDv1/2 Snooping GMRP protocol registration Multicast address management, multicast VLAN, multicast routing port, static multicast address
DHCP	DHCP Snooping
Storm Suppression	Support unknown unicast, multicast, unknown multicast, broadcast type storm suppression; Storm suppression based on bandwidth adjustment and storm filtering
Security	Support User port+IP address+MAC address ACL based on IP, MAC Support security properties of number of MAC address based on port

QOS	802.1p port queue priority algorithm Cos/Tos,QOS remark WRR(Weighted Round Robin), weighted priority rotation algorithm WRR、SP、WFQ priority scheduling modes
Cable Sequence	Auto-MDIX; auto detection on straight-through and cross-over cable
Negotiation Mode	Port support auto negotiation function(self-negotiation transmission rate and duplex mode)
System maintenance	Upgrade package upload System log viewing WEB recovery factory configuration
Network Management	WEB interface management CLI management based on Telnet、TFTIP、Console SNMP V1/V2/V3 management RMONV1/V2 management RMON management

PS: We will try our best to check the errors in the printing and pictures, but hasivo will not be responsible for any possible omissions. The appearance, specifications, parameters, prices and supply conditions of the products listed on this page are subject to change without notice.



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