SMANEX
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SW7228G-4XGF

User Manual

1. Specification

Model	SW7228G-4XGF
Ethernet Ports	24* 10/100/1000Base-T(X)
	RJ45 port supports full-duplex/half-duplex and MDI/MDI-X auto-negotiation.
Fiber ports	SFP Port: 4 * 10GBase-R, compatible 10/100/1000Base-T(X)
Fiber Optical port parameters	Wavelength: Singlemode 1310nm/1550nm, Multimode 850nm Connector type: LC (SFP Slot) Transmission distance: Singlemode 20Km~120Km optional, Multimode 550m Data rate: 1.25Gbps Wavelength: Singlemode 1310nm/1550nm Connector type: LC (SFP Slot) Transmission distance: Singlemode 10Km~80Km optional Data rate: 10Gbps
Power Supply Type	AC Model: AC85~264V
Consumption	<22W（Full Load）
IEEE Standard	IEEE 802.1x: Network login user authentication IEEE802.3: CSMA/CD IEEE 802.3x: Flow control on full duplex operation IEEE 802.1D/W: STP & RSTP IEEE 802.3u、IEEE 802.3z、 IEEE 802.1P: The number of Cos is 8 queues IEEE 802.1Q、
Switching Function	Supports VLAN: VLAN ID Maximum value 4096 Active VLAN Maximum value 4096 Port Rate Limiting Storm Control Port Aggregation: The number of link aggregation: 8 The number of aggregation goup: 24 Flow Control
Version of IP Address	IPv4 & Ipv6
Ring Network Redundancy	Supports STP/RSTP, ERPS, Private Ring Technology
Multicast	Supports IGMP Snooping, GMRP, IGMPv1/v2/v3, PIM-DM、PIM-SM
Route	Support Static Routing, RIP, OSPF, VRRP

Management	Supports Telnet, Web Browser, SNMP v1/v2c/v3，SSH, FTP/TFTP，CLI
Switching mode	Store -Forward
Switching Fabric	128Gbps
Forwarding Rate	95.232Mpps
Buffer Size	12Mbit
MAC Address	16K
DRAM	1GB
Flash	128MB
Installtion Cabinet	19”Rack-Mounted Type
Dimension	482.6mm×44mm×280mm（Including hanging ears）
Operating Temperature	-40℃~+75℃
Storage Temperature	-40℃~+85℃
Humidity	5%~95%RH (non-condensing)
Reliability Standard	FCC & CE standards
EMC	IEC61000-4-2 (ESD), Level 4
	IEC61000-4-5(Surge), Level 4 ※ The ports support 6KV surge protection.
	IEC61000-4-4(EFT), Level 4

2. Hardward and Installation

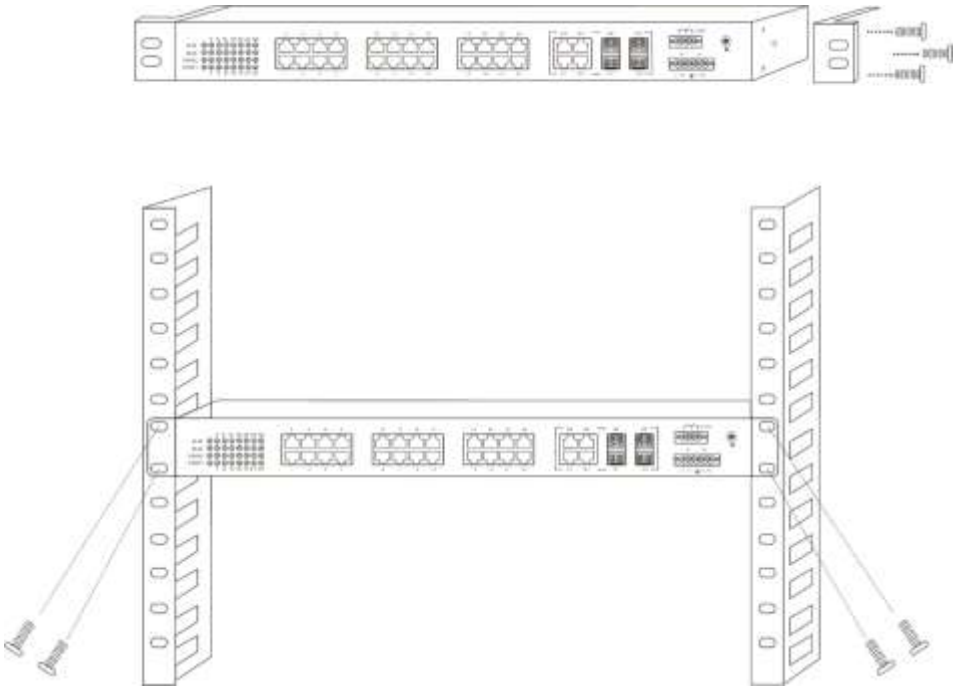
❖ Cautions

To avoid damage to the device or personal injury due to improper use, please note the following:

1. Ensure the switch is powered off during installation.
2. Make sure the input voltage is within the range specified for the switch.
3. When connecting the power supply, ensure the power cord is properly connected to the power terminals before powering on.
4. When powering off, disconnect the power supply before removing the power cord.
5. Do not open the switch's casing.
6. Do not place heavy objects on the switch.
7. Keep the switch clean and do not use any liquids to clean it.

❖ Installation

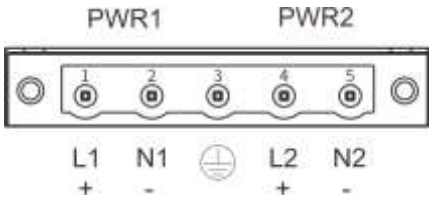
1. Choose the installation location for the product and ensure that there is sufficient space;
2. Use matching screws to install the hanging ears in pairs on the left and right sides of the product;
3. Place the product on the cabinet and align it with the rack mounting holes. Use 4 screws to secure the hanging ears on both sides.



❖ **Power Input**

The industrial Ethernet switch provides a 5-position, 7.62mm-pitch industrial-grade terminal block as the power input interface. The connection method differences depending on the power input range:

Powered by AC 85~264V / DC 110~370V. Connect the power lines to the V1+ (L) and V1- (N) terminals only. Do not connect to the V2+ or V2- terminals. Please exercise caution to prevent electric shock.

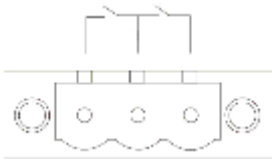


❖ Power failure alarm output

The switche supports power failure alarm functionality.

The power failure alarm output terminal uses a 3-position, 5.08mm pitch industrial-grade terminal. The power failure alarm output consists of one

normally open and one normally closed relay, with the middle position as the common terminal. The two terminals on the left are for the normally open contact, and the two terminals on the right are for the normally closed contact. When the switch is operating normally, the normally open contact is energized and closed, while the normally closed contact is open. When the system loses power, the normally open contact is de-energized and open, and the normally closed contact is closed. The recommended relay switching load capacity is 1A (@24VDC).



- Ethernet

The RJ45 port supports CAT-5 twisted pair cables and automatically recognizes straight-through and crossover cables, with a transmission distance of up to 100 meters. Users can connect their network devices (such as workstations, hubs, or switches) to the switch's RJ45 port using Cat5 twisted pair cables.

- Fiber Optical

The switch series supports LC single-mode or multi-mode fiber optic interfaces. Please confirm the interface type before connection.

Precautions for Fiber Optic Connection:

1. Before connecting the optical port, please remove the protective cap from the fiber optic port. When the fiber optic port is not in use, do not remove the protective cap to keep the fiber optic port interface clean.
2. Check the fiber optic connector for any damage or dirt. If you find any of these issues, please feel free to contact us.
3. Connect the TX of the fiber optic port to the RX of the opposite fiber optic port, and connect the RX of the fiber optic port to the TX of the opposite

fiber optic port. Please refer to the diagram below. If using a single-fiber optic port, a single fiber connection is sufficient.

4. After completing the connection, please check whether the L/A indicator light corresponding to the optical port on the device panel is lighted. If the indicator light is on, it indicates that the fiber optic connection is correct.

❖ Console

Provide 1 USB Console port, using USB Type-C interface for user device debugging and command-line configuration. When in use, on-site debugging can be carried out directly through the USB interface of the PC via an adapter cable; The PC also needs to install the matching driver program and establish a connection through third-party terminal simulation software for communication. Baud rate: 115200, data bits: 8, parity bits: none, Stop position: 1. Flow control: none.

3. LED

❖ LED Indicator

LED Indicators		Status	Definitions
Power LED	PWR1/PWR2	Steady On	Power Supply is on normal
		Off	Disconnection or malfucntion
System LED	RUN	Flash	The system is running normally
		Steady On/ Off	The system is not running or running abnormally
Alarm LED	ALM	Steady On	Port disconnection alarm, ring network alarm
		Flash	Relay has no alarm
RJ45 Port LED	Speed	Steady On	1000M connected
		Off	10/100M connected or not connected
	Link/Act	Steady On	Connection
		Flash	Data transmission and reception
		Off	Discinnection or malfunction
Optical Port LED	Link/Act	Steady On	Connection
		Flash	data transmission and reception
		Off	Discinnection or malfunction
	Speed	Steady On	10G connected
		Off	100/1000M connected or not connected

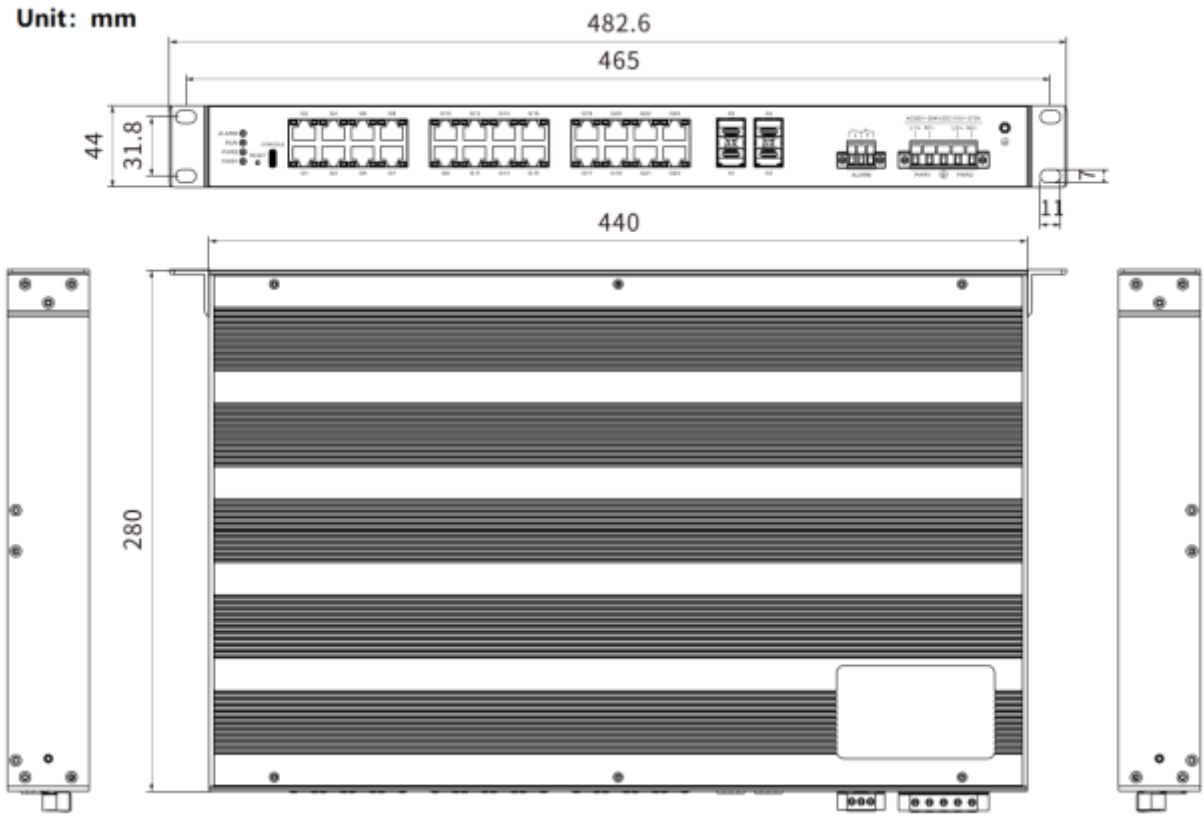
4. Web Login

The switch supports WEB management and configuration. A computer can access the device via its Ethernet interface by logging into the main interface of the WEB server through a browser.

- Configure the IP addresses of the computer and the device so they are on the same network segment, and ensure the network between them is mutually accessible.
- Enter the switche's IP address into the browser's address bar. The default IP address is 192.168.16.253.
- In the login window, input the device's username and password.
- Click the "OK" button to log in to the WEB interface of the switch.
- The default username and password are both admin.

5. Product Dimension

❖ Dimension



6. Package

❖ Packing

Item	Q'ty	Remark
Ethernet Switch device	1	
AC220V Power Cable	1	
User Manual	1	Digital copy