WidelOT

WS2028M-4GS-24T Series

1U Rack-mounted

28-port hybrid Fast Ethernet and Gigabit Ethernet Layer 2 managed industrial Ethernet switch

- Supports 4 Gigabit optical ports (SFP slots) and 24 Fast Ethernet optical/electrical selectable ports
- It adopts the patented Ring ring network technology and supports functions such as single ring, coupled ring, chained ring, and Dual-homing ring network. The automatic network failure recovery time is less than 20 ms
- With a Gigabit bandwidth, it can achieve high-performance and high-speed transmission of a large amount of video, voice, and data
- The power input range is 100 - 240VAC/DC
- It supports operation in a wide temperature range of -40 to 75℃

CE FC RoHS SW-Ring <20ms RECOVERY 工业级

Product Introduction

The WS2028M-4GS-24T series is a 28-port hybrid Fast Ethernet and Gigabit Ethernet Layer 2 managed industrial Ethernet switch. There are 8 models in this series for selection, providing various interfaces such as Fast Ethernet electrical ports, Fast Ethernet optical ports, and Gigabit SFP slots. It adopts a rack-mounted installation method to meet the requirements of different application sites.

The network management system supports multiple network protocols and industry standards, such as STP/RSTP, 802.1Q VLAN, QoS function, IGMP static multicast function, port aggregation, port mirroring, etc. It has a complete set of management functions, supporting port configuration, port statistics, access control, network diagnosis, quick configuration, online upgrade, etc. It can support access methods such as CLI, WEB, Telnet, and SNMP. The network management system features a user - friendly interface and is easy to operate, offering you a good user experience.

The RST button can restore the factory settings with one click. When a link failure occurs in the power supply or ports, the ALARM warning light will shine brightly to issue an alarm, and the alarm device connected to the relay will also issue an alarm, facilitating quick troubleshooting on - site. The hardware is designed with a fanless, low - power - consumption, wide - temperature, and wide - voltage design. After passing strict tests in line with industry standards, it can adapt to industrial field environments with harsh EMC requirements and can be widely applied in industrial fields such as smart grids, rail transit, smart cities, safe cities, new energy, and intelligent manufacturing.

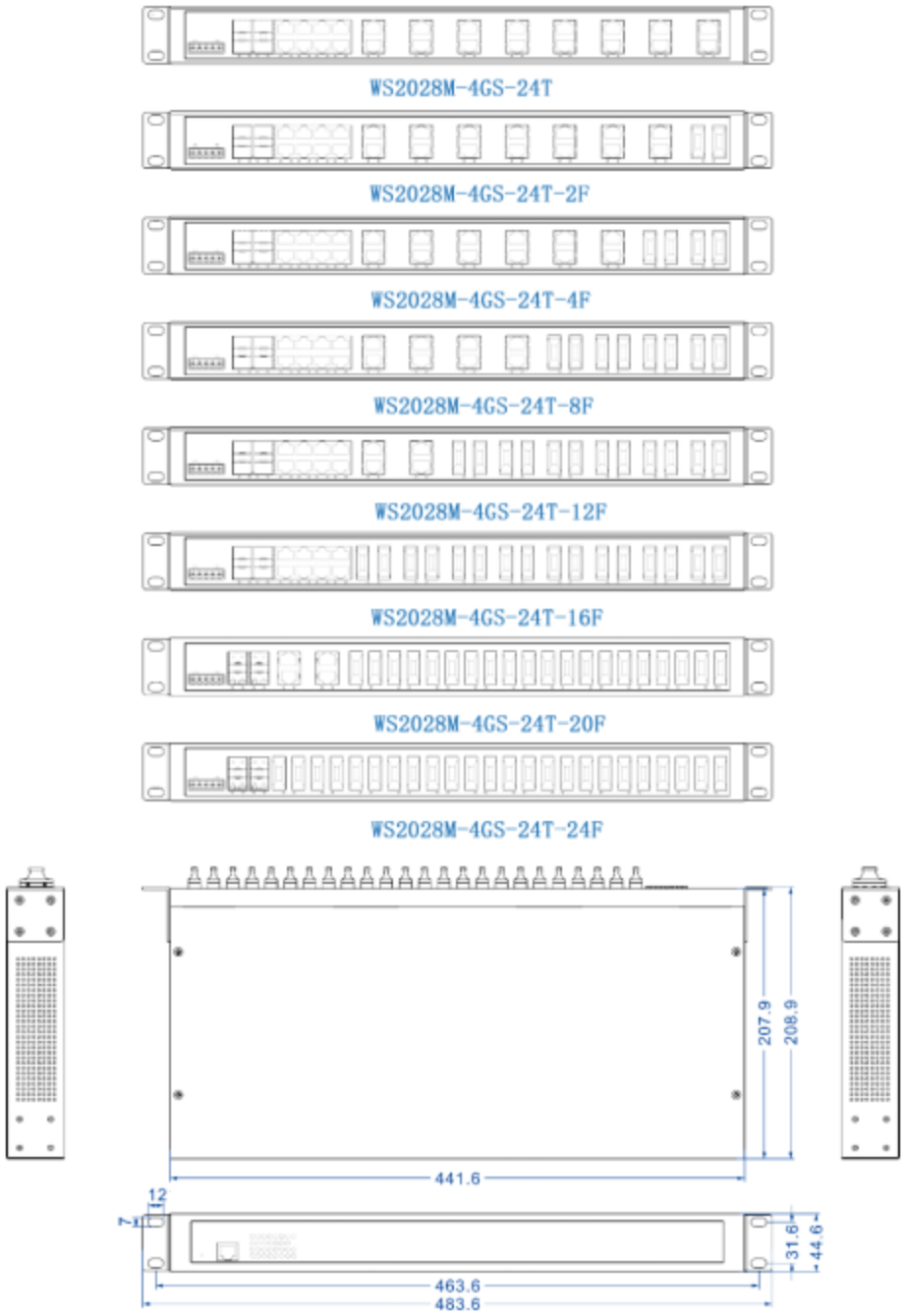
Features and Advantages

- SNMPv1/v2c is used for different levels of network management
- RMON can be used for efficient and flexible network monitoring
- Port mirroring can analyze and monitor data, facilitating online debugging
- QoS allows real - time traffic classification and prioritization
- The DHCP server and DHCP client can be used to allocate IP addresses with different policies
- File management facilitates rapid device configuration and online upgrade
- Bandwidth management can rationally allocate network bandwidth and prevent unpredictable network condition
- Port statistics can be used for real - time port traffic statistics
- User passwords can be used for user - level management, improving device management security
- Mac port locking can enhance network flexibility and security
- Email alarms facilitate timely detection of faults during remote management
- Relay alarms facilitate fault troubleshooting at construction sites
- Storm control can suppress broadcasts, unknown multicasts, and unknown unicasts

- VLAN can simplify network planning by setting up virtual local area networks
- Port aggregation can increase network bandwidth, enhance the reliability of network connections, and achieve optimal bandwidth utilization
- IGMP snooping, GMRP, and static multicast can be used to filter multicast traffic and save network bandwidth
- SW - Ring and STP/RSTP can achieve network redundancy and prevent network storms

Appearance Dimensions

Unit: mm



Specifications

Standards and Protocols	10Base - T, compliant with IEEE 802.3 100Base - TX and 100Base - FX, compliant with IEEE 802.3u 1000Base - X, compliant with IEEE 802.3z Flow control, compliant with IEEE 802.3x Spanning Tree, compliant with IEEE 802.1D Rapid Spanning Tree, compliant with IEEE 802.1w VLAN, compliant with IEEE 802.1Q CoS, compliant with IEEE 802.1p
Management Functions	SNMP v1/v2c for centralized device management, RMON, port mirroring, QoS, DHCP Server, DHCP Client, file management, port statistics
Security Technologies	User privilege classification, port alarm, email alarm
Switching Functions	802.1Q Vlan, port static aggregation, bandwidth management, flow control
Unicast/Multicast Technologies	Static multicast, GMRP, IGMP - Snooping
Redundancy Technologies	Ring, STP/RSTP
Time Management	SNTP
Interfaces	Electrical ports: 10/100Base - T(X), RJ45, with automatic flow rate control, full/half - duplex mode, and MDI/MDI - X auto - detection Optical ports: 100Base - FX, with optional SC/ST/FC interfaces SFP slots: 1000Base - SFP Console port: CLI command - line management port (RS - 232), RJ45 Alarm port: 2 - core terminal block with a 5.08mm pitch, supporting 1 - channel relay alarm output, with a current load capacity of 5A@30VDC or 10A@125VAC
Indicators	Operating indicator, interface indicator, power indicator, alarm indicator
Switching Attributes	Transmission mode: Store - and - Forward

MAC address: 8K
Buffer: 3Mbit
Backplane bandwidth: 12.8G
Switching delay: < 10μs

Power Supply	100 - 240VAC/DC Supports 8A over - current protection

Power Consumption

Order number	No-load (@220VAC)	Full-load (@220VAC)
WS2028M-4GS-24T	7.4W	13.1W
WS2028M-4GS-24T-2F	8.7W	14.4W
WS2028M-4GS-24T-4F	10W	15.7W
WS2028M-4GS-24T-8F	12.6W	18.3W
WS2028M-4GS-24T-12F	15.2W	20.9W
WS2028M-4GS-24T-16F	17.8W	23.5W
WS2028M-4GS-24T-20F	19.4W	24.1W
WS2028M-4GS-24T-24F	22W	26.2W

Operating Environment	Operating temperature: -40 to 75°C Storage temperature: -40 to 85°C Relative humidity: 5% - 95% (non - condensing)
Mechanical Structure	Enclosure: IP30 protection level, metal enclosure Installation: 19 - inch 1U rack - mounted Dimensions (Width × Height × Depth): 441.6mm×207.9mm×44.6mm
Industry Standards	IEC 61000-4-2 (ESD) , Level 4 ● Air discharge: ±15kV ● Contact discharge: ±8kV IEC 61000-4-4 (EFT) , Level 4 ● Power supply: ±4kV ● Ethernet interface: ±2kV ● Relay: ±4kV IEC 61000-4-5 (Surge) , Level 4 ● Power supply: Common - mode ±4kV, Differential - mode ±2kV ● Ethernet interface: ±4kV ● Relay: Common - mode ±4kV, Differential - mode ±2kV Shock: IEC 60068 - 2 - 27 Free fall: IEC 60068 - 2 - 32

	Vibration: IEC 60068 - 2 - 6
Certifications	CE、FCC、RoHS
Warranty	5 years

Ordering Information

Order number	Gigabit SFP Slots	Fast Ethernet Optical Ports	Fast Ethernet Electrical Ports	Power Supply
WS2028M-4GS-24T	4	—	24	100~240VAC/DC
WS2028M-4GS-24T-2F	4	2	22	
WS2028M-4GS-24T-4F	4	4	20	
WS2028M-4GS-24T-8F	4	8	16	
WS2028M-4GS-24T-12F	4	12	12	
WS2028M-4GS-24T-16F	4	16	8	
WS2028M-4GS-24T-20F	4	20	4	
WS2028M-4GS-24T-24F	4	24	—	

Company Introduction

Established in 2011, Wutong Bolian is a leading provider of industrial Internet of Things products and industrial digital solutions. It focuses on offering products and solutions such as wireless data terminals, industrial intelligent gateways, equipment remote systems, and industrial application cloud platforms for equipment manufacturers, smart factories, and industry projects. It helps customers achieve digital operation management and tap new values in the industrial Internet.

The products of WidelOT are widely used in various industrial fields, including smart factories, equipment manufacturers, the environmental protection industry, the energy industry, municipal engineering, industrial automation, smart agriculture, and building intelligence. They are favored by top - tier domestic and foreign customers such as BOE, Foxconn, ASD, TCL, Schneider, Shanghai Electric, Shougang Group, Water Affairs Group, and Southern Power, as well as a large number of small and medium - sized enterprises.

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