



WS1010M-2GS-8T Series

DIN Rail or Wall-mounted Installation

12-port Full Gigabit Layer 2 Managed Industrial Ethernet Switch

- Supports 2 2.5G SFP slots, 2 Gigabit SFP slots, and 8 Gigabit Ethernet ports
- Adopts Ring network patented technology, supporting single-ring, coupled-ring, chain-ring, and Dual-homing ring network functions. The network fault auto-recovery time is less than 20ms
- Supports a variety of network protocols and industry standards, such as STP/RSTP/MSTP, ERPS, DHCP, VLAN, QoS, IGMP Snooping, LLDP, ACL, SNMP, etc
- Supports 2 input power options: 48VDC, 220VAC/DC
- Supports wide - temperature operation from -40 °C to 75°C



Introduction

The WS1010M-2GS-8T series is a 12-port full gigabit layer 2 managed industrial Ethernet switch. This series provides various interfaces such as gigabit Ethernet ports, gigabit SFP slots, and 2.5G SFP slots. It supports two power supply methods, 48VDC and 220VAC/DC, and adopts DIN rail or wall-mounted installation methods, which can meet the requirements of different application sites.

The network management system supports multiple network protocols and industry standards, such as Ring, STP/RSTP/MSTP, ERPS, DHCP Server/Snooping/Relay, VLAN, QoS, IGMP Snooping, LLDP, port aggregation, port mirroring, etc. It has comprehensive management functions, supporting port configuration, NAS, ACL, network diagnosis, online upgrade, etc. It can support access methods such as CLI, WEB, TELNET, SSH, and SNMP. The network management system has a user-friendly interface and is easy to operate, providing you with a good user experience.

The DC power supply adopts two independent power supply circuits to ensure that the device can still operate normally when one power supply fails. The design of the DIP switch can realize the restoration of the device to its factory settings. When a link failure occurs in the DC power supply or a port, the ALM alarm light will shine brightly to send an alarm, and the alarm device connected to the relay will also issue an alarm, facilitating rapid on-site troubleshooting. 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 AP coverage, rail transit, smart cities, safe cities, new energy, smart grids, and intelligent manufacturing.

Features and Advantages

- ④ SNMPv1/v2c/v3 is used for different levels of network management
- ④ RMON can be used for efficient and flexible network monitoring
- ④ QoS allows real-time traffic classification and prioritization
- ④ LLDP enables automatic topology discovery for convenient visual management
- ④ The DHCP server and DHCP client are used to allocate IP addresses with different policies
- ④ DHCP Snooping ensures that DHCP clients obtain IP addresses from legitimate DHCP servers
- ④ The DHCP relay function enables the configuration of IP addresses, gateways, and DNS across network segments
- ④ File management facilitates quick device configuration and online upgrades
- ④ User privilege level configuration can be used to set user privilege levels
- ④ SSH configuration and HTTPS configuration improve device management security and ensure data access security
- ④ Supports NAS network access services to provide security guarantees for multiple

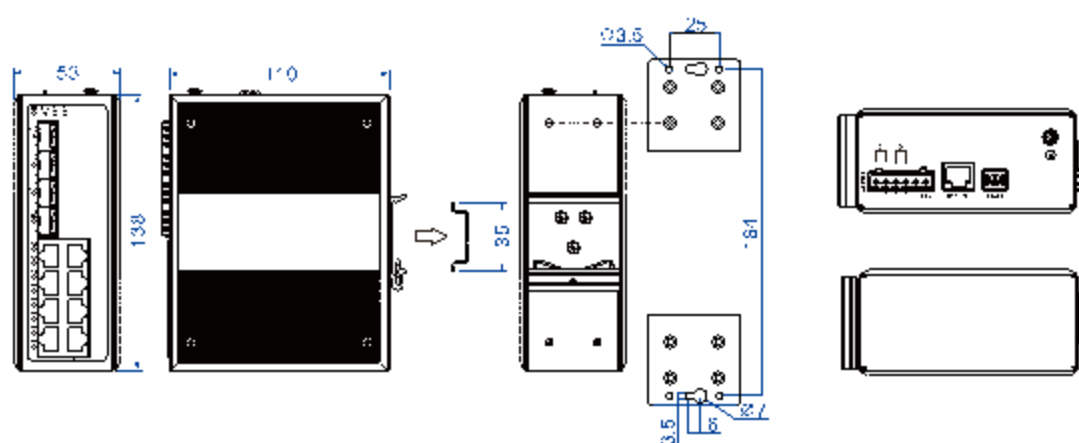
services

- ⊙ The MEP function can determine the scope and boundaries of the maintenance domain
- ⊙ Ring and STP/RSTP/MSTP can achieve network redundancy and prevent network storms
- ⊙ The ERPS function can achieve link backup and improve network reliability
- ⊙ The relay alarm facilitates troubleshooting at the construction site
- ⊙ Storm suppression can suppress broadcasts, unknown multicasts, and unknown unicasts
- ⊙ VLAN simplifies network planning by setting up virtual local area networks
- ⊙ Port aggregation and LACP increase network bandwidth, enhance the reliability of network connections, and achieve optimal bandwidth utilization
- ⊙ IGMP Snooping can be used to filter multicast traffic and save network bandwidth
- ⊙ Supports DDM digital diagnostic monitoring function, which can monitor real-time parameters such as the optical power and temperature of SFP optical modules with DDM functions, facilitating fiber optic link fault diagnosis
- ⊙ Network diagnosis and troubleshooting can be carried out through Ping and cable detection
- ⊙ Port mirroring can be used to analyze and monitor data, facilitating online debugging

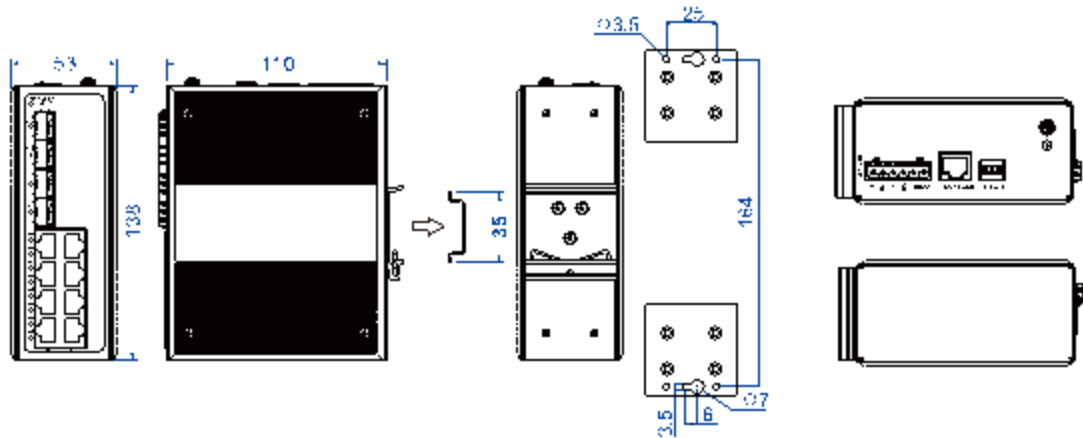
Appearance Dimensions

Unit: mm

- WS1010M-2GS-8T-2P48



● WS1010M-2GS-8T-P220



Specifications

Standards and Protocols	10Base-T, compliant with IEEE 802.3 100Base-TX, compliant with IEEE 802.3u 1000Base-T, compliant with IEEE 802.3ab 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 Multiple Spanning Tree, compliant with IEEE 802.1s ERPS, compliant with ITU-T G.8032 VLAN, compliant with IEEE 802.1Q CoS, compliant with IEEE 802.1p LLDP, compliant with IEEE 802.1AB LACP, compliant with IEEE 802.3ad
Management Functions	SNMP v1/v2c/v3 for centralized device management, QoS, DHCP Server, DHCP Snooping, DHCP relay, static MAC address, LLDP, storm suppression, user password, login method, file management, log management, port statistics
Security Technologies	User privilege level classification, authentication method configuration, SSH configuration, HTTPS configuration, access control, SNMP, RMON, port restriction control, port security, NAS, ACL, Ethernet services, RADIUS server authentication, TACACS+ server authentication, port alarm, DC power alarm
Switching Functions	802.1Q VLAN, static aggregation, LACP
Unicast/Multicast	IGMP-Snooping, multicast MAC

Technologies	
Redundancy Technologies	Ring, STP/RSTP/MSTP, ERPS
Fault Diagnosis	Ping, Ping6, cable detection, DDML, port mirroring
Time Management	NTP, time zone configuration
Interfaces	Gigabit Ethernet ports: 10/100/1000Base-T(X), RJ45, with automatic flow rate control, full/half-duplex mode, and MDI/MDI-X auto-detection Gigabit SFP slots: 100/1000Base-X adaptive or forced mode, SFP slots 2.5G SFP slots: 100/1000/2.5GBase-X adaptive or forced mode, SFP slots Console port: CLI command-line management port (RS-232), RJ45 Alarm port: 6-pin 5.08mm pitch terminal block (2 positions occupied by the relay), supporting 1-way relay alarm output with a current load capacity of 1A@30VDC or 0.3A@125VAC
Indicators	Operating indicator, alarm indicator, power indicator, interface indicator
Switching Attributes	Transmission mode: store-and-forward MAC address: 8K Cache: 4Mbit Backplane bandwidth: 58G Switching delay: <10μs
Power Supply	WS1010M-2GS-8T-2P48: - Power input: 12/24/48VDC - Connection method: 6-pin 5.08mm pitch terminal block (4 positions for power supply) - Number of power supplies: dual power supply redundant backup - Connection protection: reverse connection protection - Overcurrent protection: 3A WS1010M-2GS-8T-P220: - Power input: 220VAC/DC - Connection method: 6-pin 5.08mm pitch terminal block (4 positions for power supply)
Power Consumption	WS1010M-2GS-8T-2P48: No-load power consumption: 6.8W@48VDC Full-load power consumption: 8.0W@48VDC

Operating Environment	Operating temperature: -40°C to 75°C
	Storage temperature: -40°C to 85°C
	Relative humidity: 5% - 95% (non-condensing)
Mechanical Structure	Enclosure: IP40 protection level, metal enclosure
	Installation: DIN rail or wall-mounted installation
	Weight: ≤0.78kg
	Dimensions (width × height × depth): 53mm × 138mm × 110mm
Industry Standards	IEC 61000-4-2 (ESD, Electrostatic Discharge Immunity), Level 4
	● Air discharge: ±15kv
	● Contact discharge: ±8kv
	IEC 61000-4-4 (EFT, Electrical Fast Transient Pulse Immunity), Level 4
	● Power supply: ±4kv
	● Ethernet port: ±2kv
	IEC 61000-4-5 (Surge, Surge Impact Immunity), Level 4
	● Power supply: common mode ±4kv, differential mode±2kv
	● Ethernet port: common mode ±4kv, differential mode±2kv
	Shock: IEC 60068-2-27
Certifications	Free fall: IEC 60068-2-32
	Vibration: IEC 60068-2-6
Warranty	CE, FCC, RoHS
	5 years

Ordering Information

Order number	Gigabit RJ45	2.5G SFP Slots	Gigabit SFP Slots	Power Supply
WS1010M-2GS-8T-2P48	8	2	2	12/24/48VDC
WS1010M-2GS-8T-P220	8	2	2	220VAC/DC

Company Introduction

Established in 2011, WideIoT 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 WideIoT 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.

Xiamen WideIoT Technology Co. Ltd.

Company Website : www.wideiot.com

Contact Phone: +86-0592-2031080

Contact Email: info@wideiot.com

Contact Address: Xiamen Software Park Phase III, China