

IES5100 Series

19-inch 1U Rack Mounting

24-Port Layer 2 Managed Industrial Ethernet Switch

- Support 24 100M Ethernet ports (optional fiber/copper ports)
- Adopt Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 50ms
- Support Modbus TCP protocol, and the client can read the switch information, which is convenient for integrated monitoring and management
- Optional DC (18~72VDC) or AC (85~264VAC/DC) power supply, support dual power supply redundancy
- Support -40~75°C wide operating temperature range
- Support IP40 protection grade



Introduction

IES5100 series are 24-port layer 2 managed industrial Ethernet switches. This series of products provide 100M copper port and 100M fiber port. A variety of different fiber/copper port combination schemes can be selected. Support 18~72VDC or 85~264VAC/DC power supply scheme(optional), and adopt rack installation mode, which can meet the requirements of different application sites.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS Function, IGMP Snooping Function, Link Aggregation, Port Mirroring, LLDP, 802.1X, Modbus TCP; It also possesses complete management functions, including log information, DHCP Server, Port Configuration, Port Statistics, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SSH, SNMP and other access methods. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

RESET button can reboot the device and restore factory defaults. The input power supply is two independent power supply circuits which can ensure the normal operation of the device when one power supply fails. When power supply or port has link failure, ALM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. The hardware adopts fanless, low power consumption and wide temperature design, which has passed rigorous industrial standard tests, and suits the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, new energy storage, new energy, smart mining, smart motorway, intelligent manufacturing and other industrial fields.

Features and Benefits

- ⊙ SNMPv1/v2c/v3 is used for network management of various levels
- ⊙ Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- ⊙ QoS supports real-time traffic classification and priority setting
- ⊙ LLDP can achieve automatic topology discovery, which is convenient for visual management
- ⊙ File management is convenient for rapid configuration and online upgrading of the device
- ⊙ Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- ⊙ Port statistics can be used for the port real time traffic statistics
- ⊙ Relay alarm is convenient for troubleshooting of construction site
- ⊙ Storm suppression can restrain broadcast, unknown multicast and unicast
- ⊙ Support TELNET configuration and SSH configuration, SSH can guarantee secure

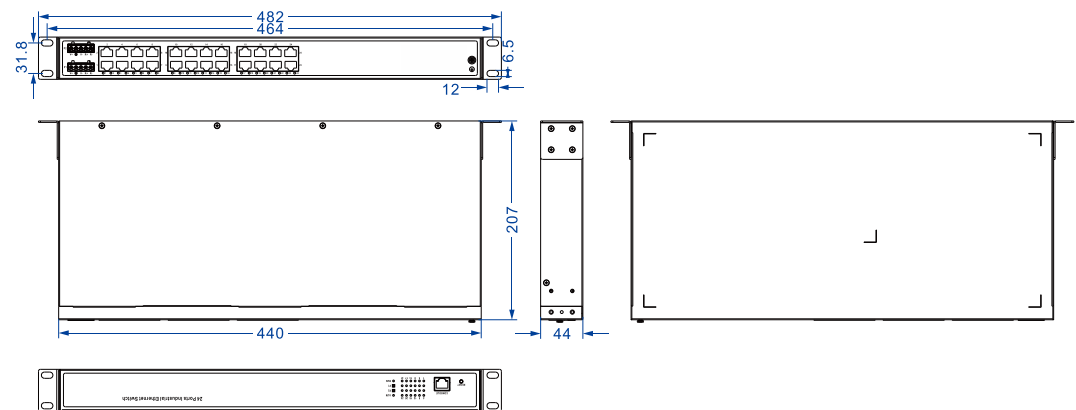
access to data

- VLAN is used for simplifying network planning
- Port Trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- IGMP Snooping can be used for filtering multicast traffic to save the network bandwidth
- Ring and STP/RSTP can achieve network redundancy, preventing network storm
- 802.1X authentication could strengthen the flexibility and security of network
- Loop protection could efficiently eliminate the influence caused by port loopback by detecting the existence of port loopback
- Support Modbus TCP protocol, and the client can read the switch information, which is convenient for integrated monitoring and management
- Network diagnosis and troubleshooting could be conducted via Ping
- Support log information and Syslog server, which can check the log information of the device system locally or remotely

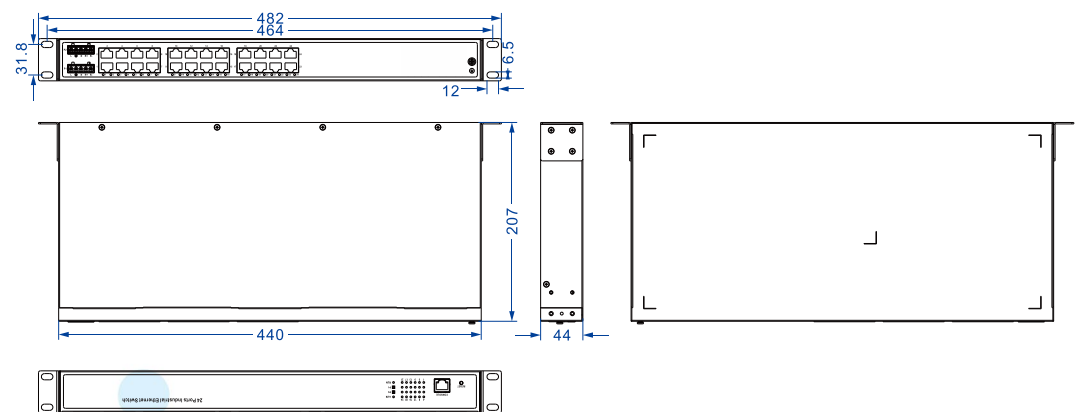
Dimension

Unit: mm

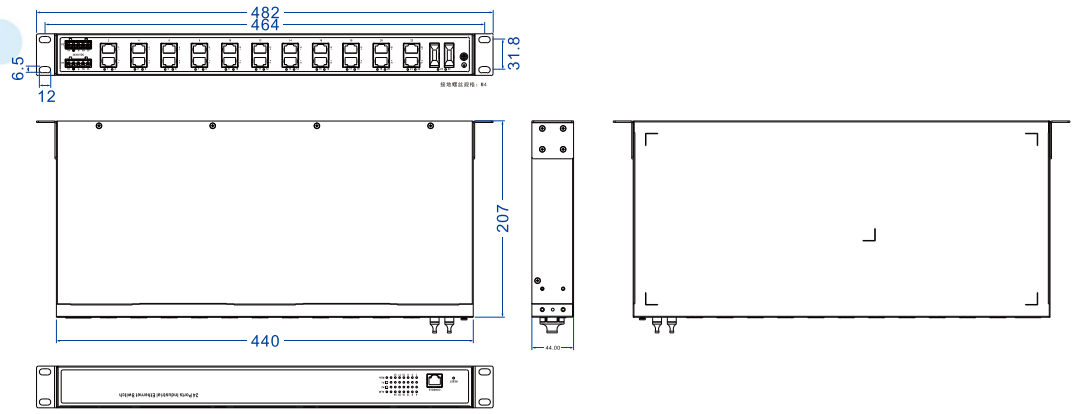
● IES5100-24T-2LV



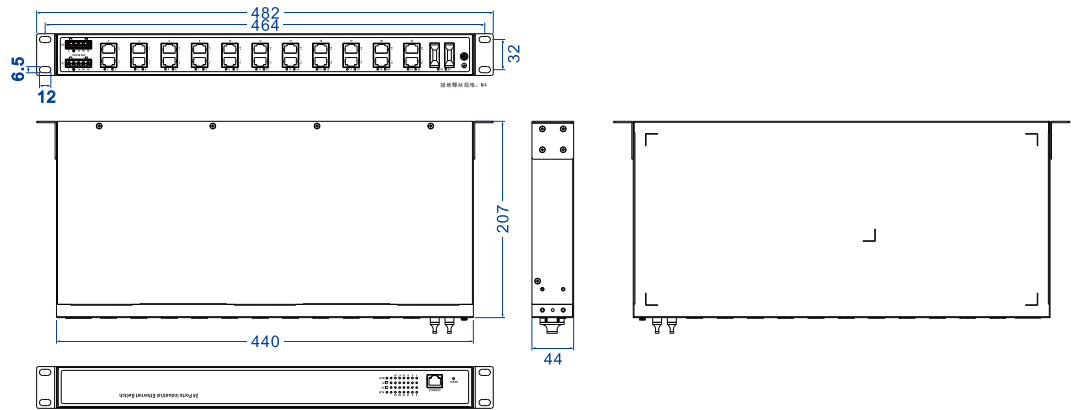
● IES5100-24T-2HV



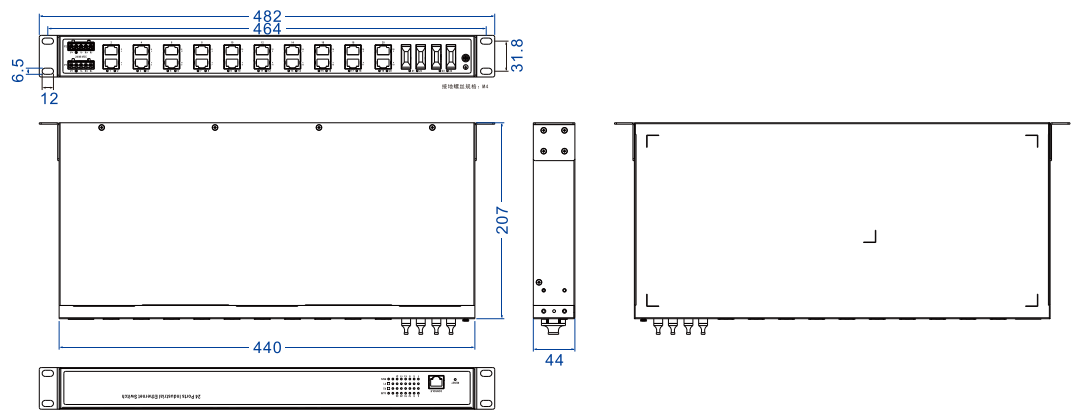
● IES5100-22T2F-2LV



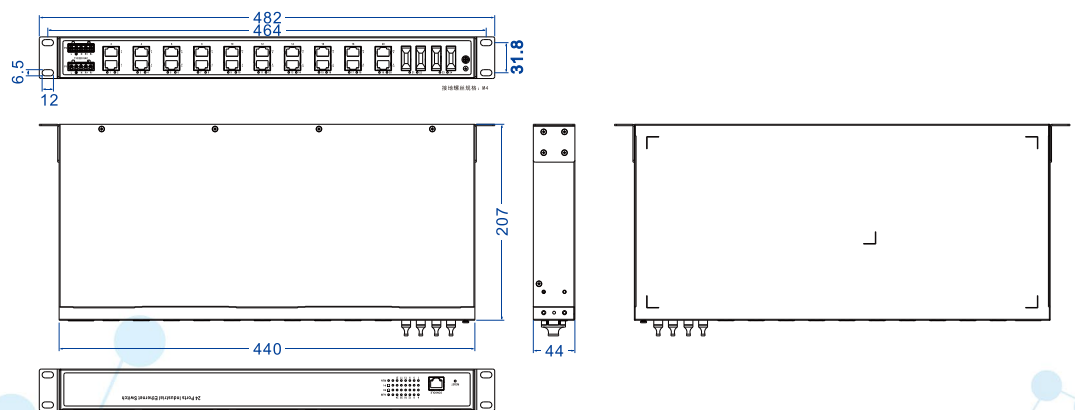
● IES5100-22T2F-2HV



● IES5100-20T4F-2LV



● IES5100-20T4F-2HV



● IES5100-24F-2LV

Unicast / Multicast	Multicast filtering, IGMP Snooping, dynamic multicast, MAC information
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Redundancy Technology	Ring, STP/RSTP
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Troubleshooting	Ping
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Time Management	SNTP Client, Time Zone Configuration
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Interface	<p>100M copper port: 10/100Base-T(X) self-adaption, RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/ MDI-X Autotuning</p> <p>100M fiber port: 100Base-FX, SC connector</p> <p>CONSOLE port: CLI command line management port(RS-232), RJ45</p> <p>Relay: support 2 relay alarm outputs, and adopt 2 5-pin 5.08mm pitch terminal blocks, relay occupies the right 2 pins, the current carrying capacity is 1A@30VDC or 0.3A@125VAC</p>
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Indicator	Power indicator, running indicator, alarm indicator, interface indicator
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Switch Property	<p>Transmission mode: store and forward</p> <p>MAC address: 16K</p> <p>Packet buffer size: 4Mbit</p> <p>Backplane bandwidth: 12.8Gbps</p> <p>Switch delay: <10μs</p>
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Power Supply	<p>IES5100-24T-2LV, IES5100-22T2F-2LV, IES5100-20T4F-2LV, IES5100-24F-2LV</p> <ul style="list-style-type: none"> Input voltage: 24VDC/48VDC (18~72VDC) Power supply quantity: dual power supply redundancy Connection method: 2 5-pin 5.08mm pitch terminal blocks (includes 3-pin power supply on the left side) Connection protection: non-polarity
	<p>IES5100-24T-2HV, IES5100-22T2F-2HV, IES5100-20T4F-2HV, IES5100-24F-2HV</p> <ul style="list-style-type: none"> Input voltage: 110VAC/DC, 220VAC/DC (85~264VAC/DC) Power supply quantity: dual power supply redundancy Connection method: 2 5-pin 5.08mm pitch terminal blocks (includes 3-pin power supply on the left side)

Power Consumption	Model	No-load	Full-load
	IES5100-24T-2LV	4.5W@48VDC	10.8W@48VDC
	IES5100-24T-2HV	7.3W@220VAC	11.7W@220VAC

IES5100-22T2F-2LV	5.3W@48VDC	7.1W@48VD
IES5100-22T2F-2HV	8.4W@220VAC	11.9W@220VAC
IES5100-20T4F-2LV	6.6W@48VDC	8.6W@48VDC
IES5100-20T4F-2HV	10.0W@220VAC	12.2W@220VAC
IES5100-24F-2LV	28.4W@48VDC	29.7W@48VDC
IES5100-24F-2HV	20.7W@220VAC	22W@220VAC

Working Environment

Operating temperature: -40~75°C
 Storage temperature: -40~85°C
 Relative humidity: 5%~95% (no condensation)

Mechanical Structure

Housing: IP40 protection, metal
 Installation: 19-inch 1U rack mounting
 Dimension (W x H x D): 440mm×44mm×207mm (lugs are not included)
 Weight:

- IES5100-24T-2LV is 2.31kg
- IES5100-24T-2HV is 2.62kg
- IES5100-24F-2LV is 2.42kg
- IES5100-24F-2HV is 2.659kg

Industrial Standard

IEC 61000-4-2 (ESD, electronic static discharge), Level 4

- Contact discharge: ±8kV
- Air discharge: ± 15kV

IEC 61000-4-4 (EFT, electrical fast transient pulses), Level 4

- Power supply: ±4kV
- Copper port: ±2kV
- Relay: ±4kV

IEC 61000-4-5 (Surge), Level 4

- Power supply: differential mode±2kV, common mode±4kV
- Copper port: differential mode±2kV, common mode±4kV
- Relay: differential mode±2kV, common mode±4kV

Shock: IEC 60068-2-27

Free fall: IEC 60068-2-31

Vibration: IEC 60068-2-6

Authentication

CE, FCC, RoHS

Warranty

5 years

Ordering Information

Model	100M Copper Port	100M Fiber Port	Power Supply
IES5100-24T-2LV	24	—	24VDC/48VDC (18~72VDC) Support dual power supply redundancy and non-polarity
IES5100-24T-2HV	24	—	110VAC/DC, 220VAC/DC 85~264VAC/DC, dual power supply redundancy
IES5100-22T2F-2LV	22	2	24VDC/48VDC (18~72VDC) Support dual power supply redundancy and non-polarity
IES5100-22T2F-2HV	22	2	110VAC/DC, 220VAC/DC 85~264VAC/DC, dual power supply redundancy
IES5100-20T4F-2LV	20	4	24VDC/48VDC (18~72VDC) Support dual power supply redundancy and non-polarity
IES5100-20T4F-2HV	20	4	110VAC/DC, 220VAC/DC 85~264VAC/DC, dual power supply redundancy
IES5100-24F-2LV	—	24	24VDC/48VDC (18~72VDC) Support dual power supply redundancy and non-polarity
IES5100-24F-2HV	—	24	110VAC/DC, 220VAC/DC 85~264VAC/DC, dual power supply redundancy



Address: 3/B, Zone 1, Baiwangxin High Technology Industrial Park, Song Bai Road, Nanshan District, Shenzhen, 518108, China

TEL.: +86-755-26702668 ext 835 FAX: +86-755-26703485

E-mail: ics@3onedata.com

Website: www.3onedata.com

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