IES5200 Series

19-inch 1U Rack Mounting

28-port 100M/Gigabit Layer 2 Managed Industrial Ethernet Switch

- Support 8/16/20/22/24 100M copper ports, 2/4/8/16 100M fiber ports and 4 Gigabit COMBO ports, in which Gigabit RJ45 or Gigabit SFP slots can be selected for COMBO ports

- Adopt Ring patented technology, support single ring, coupling ring, chain, Dual-homing ring network function, automatic recovery time of network failure < 50ms

- Support MRP network redundancy, improve network reliability, reconfiguration time ≤200ms

- Support Modbus TCP protocol, and the client can read the switch information, which is convenient for integrated monitoring and management

- 2 24/48VDC (18-72VDC) or 2 110/220VAC (85~264VAC/DC) redundant power inputs

- Support -40~75℃ wide operating temperature range

- Support IP40 protection grade

Industrial Grade   RPS   Fanless Desig   IP40

Introduction

IES5200 series products are 28-port 100M/Gigabit layer 2 managed industrial Ethernet switches. This series has 10 products to choose from, providing 100M copper port, 100M fiber port, and Gigabit COMBO port. Copper ports can negotiate the port rate and duplex mode with the device at the opposite end through self-negotiation. Support 18~72VDC or 85~264VAC/DC power supply scheme, and adopt rack installation mode, which can meet the requirements of different application sites.

Network management system supports a variety of network protocols and industry standards, such as IPv4, VLAN, STP/RSTP/MSTP, ERPS, DHCP, LLDP, IGMP Snooping, QoS, Modbus TCP monitoring, port trunking, port mirroring, etc. It has perfect management functions, supporting port configuration, port statistics, ACL, 802.1X authentication, network diagnosis, rapid configuration, online upgrade, etc. CLI, WEB, Telnet, SNMP, SSH, and other access methods can be supported. 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
- ⊙ RMON can be used for efficient and flexible network monitoring
- ⊙ 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
- ⊙ DHCP server and DHCP client could be used for allocating IP address of different strategies
- ⊙ DHCP Snooping can ensure DHCP client gets IP address from legal DHCP server
- ⊙ User privilege classification configuration can set user privilege level
- ⊙ SSH configuration and HTTPS configuration can improve device's management security and guarantee data access security

- ⊙ VLAN is used for simplifying network planning
- ⊙ File management is convenient for the device rapid configuration and online upgrading
- ⊙ Log management records Console log, RAM log and Flash log
- ⊙ Bandwidth management can reasonably distribute network bandwidth, preventing unpredictable network status
- ⊙ Port statistics can be used for the port real time traffic statistics
- ⊙ User password can conduct user hierarchical management to improve the device management security
- ⊙ ACL can enhance network flexibility and security
- ⊙ Relay alarm is convenient for troubleshooting of construction site
- ⊙ Storm suppression can restrain broadcast, unknown multicast and unicast
- ⊙ Port Trunking can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ⊙ IGMP Snooping and static multicast can be used to filter multicast data to save network bandwidth
- ⊙ STP/ RSTP/ MSTP could implement network redundancy and prevent network storm
- ⊙ With high reliability and stability, ERPS could avoid broadcast storm caused by data loopback
- ⊙ Support Modbus TCP protocol which can monitor device information in real time.
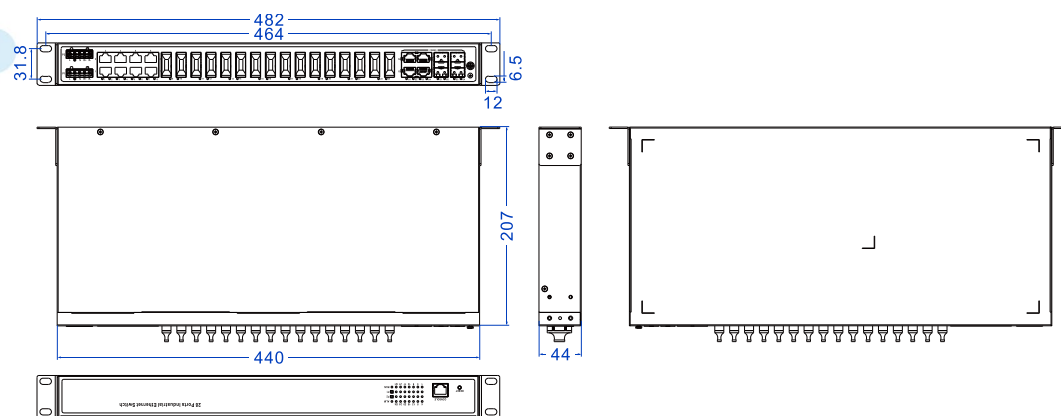- ⊙ Network diagnosis and troubleshooting could be conducted via Ping, Traceroute, Cable Diagnosis, SFP Digital Diagnosis
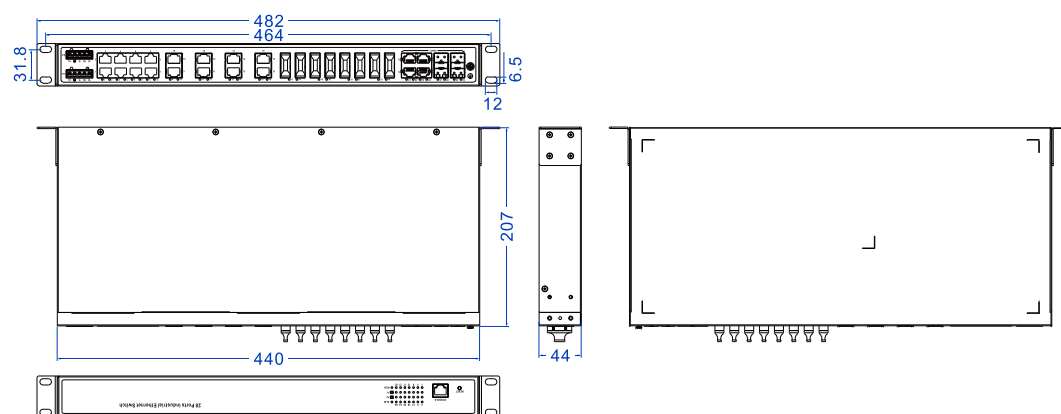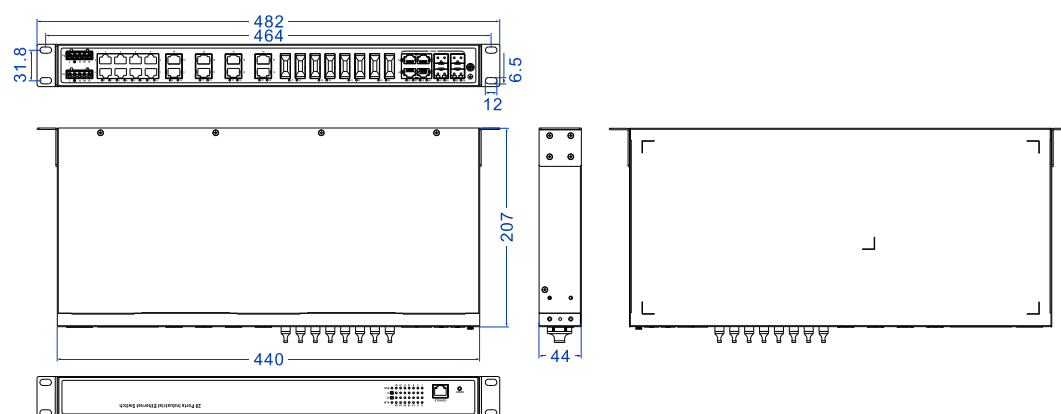
Dimension

Unit: mm

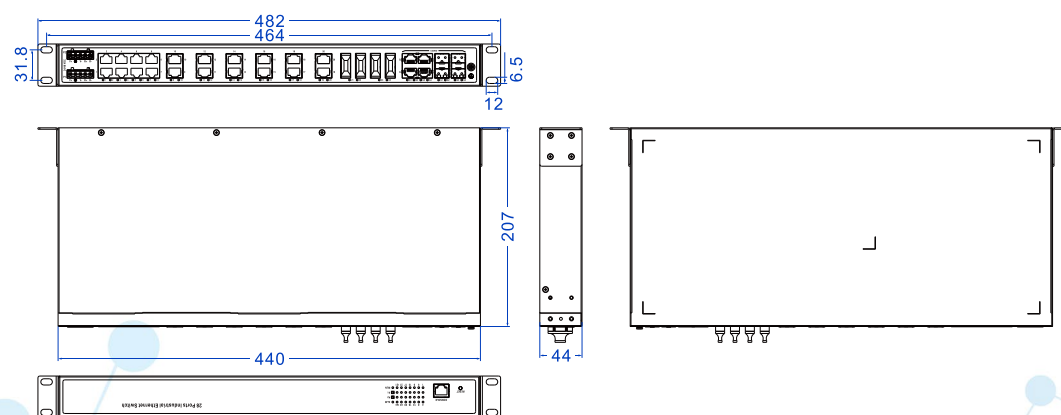- ● IES5200-8T16F4GC-2LV
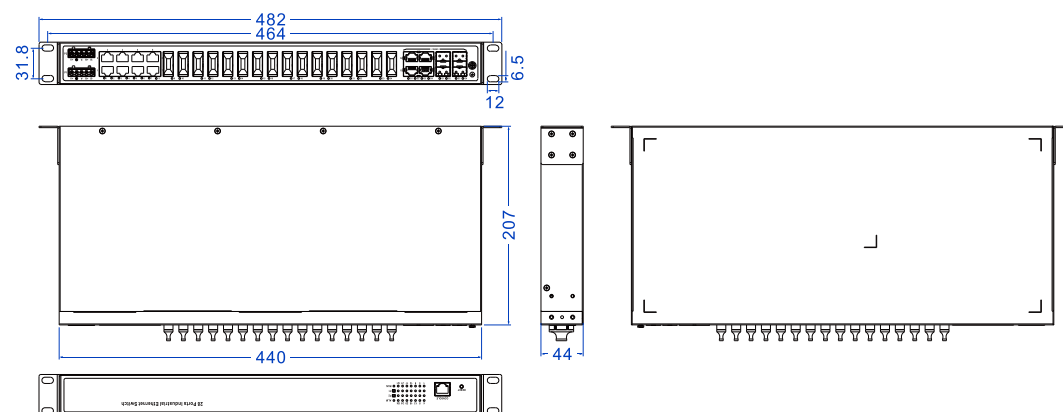
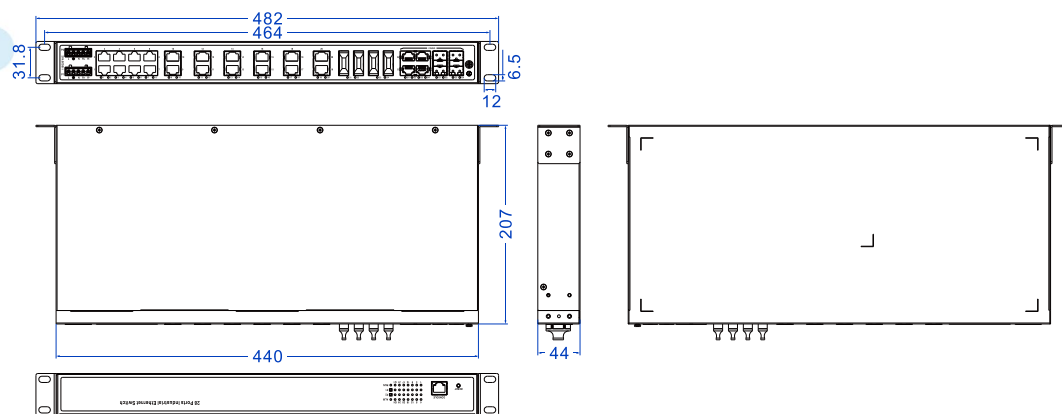- ● IES5200-8T16F4GC-2HV

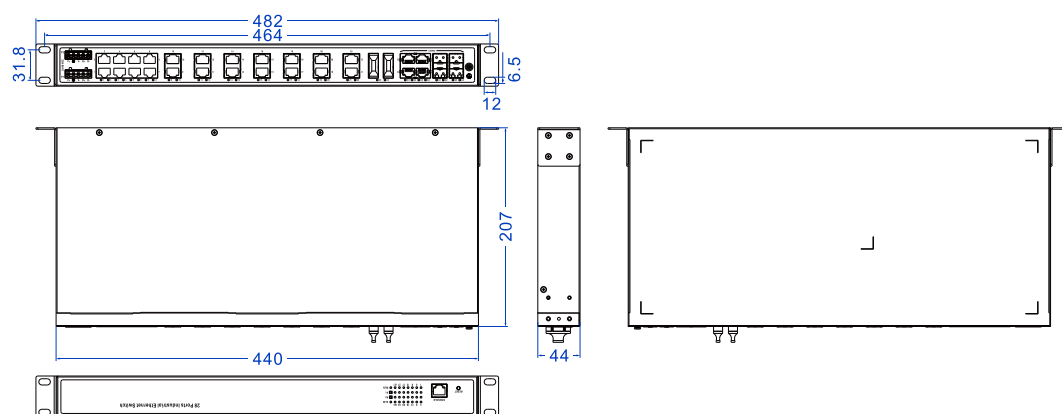- IES5200-16T8F4GC-2LV

- IES5200-16T8F4GC-2HV
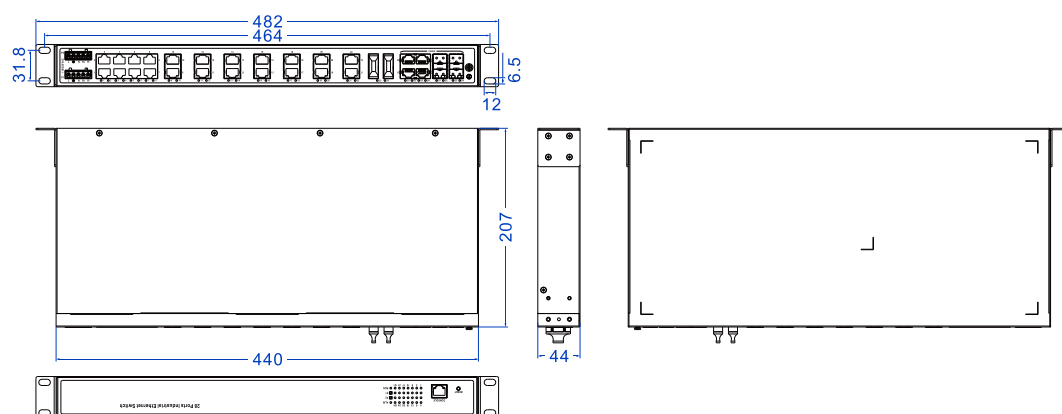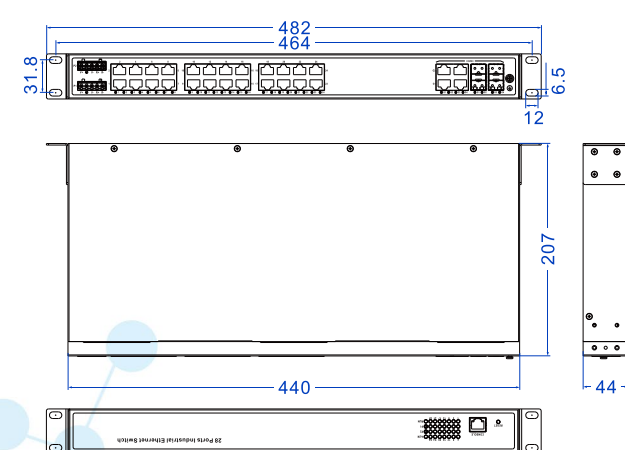

- IES5200-20T4F4GC-2LV
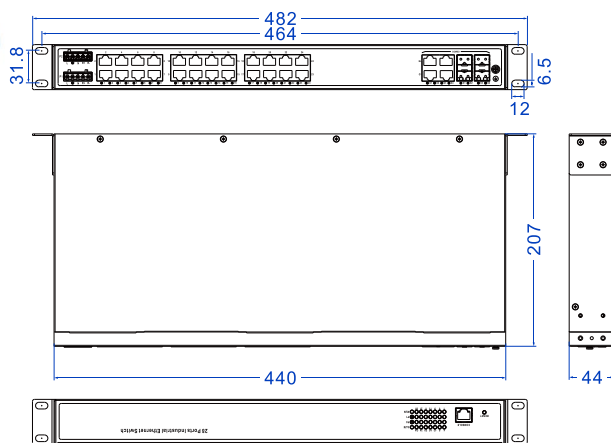

- IES5200-20T4F4GC-2HV

● IES5200-22T2F4GC-2LV

● IES5200-22T2F4GC-2HV

● IES5200-24T4GC-2LV

● IES5200-24T4GC-2HV

Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3ab for 1000Base-T IEEE 802.3z for 1000Base-X IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEC 62439-2 for MRP IEEE 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.1X for 802.1X Authentication IEEE 802.1AB for LLDP
Management	SNMP v1/v2c/v3, RMON, LLDP, PoE, QoS, DHCP Server, DHCP Snooping, port settings, dynamic/static MAC addresses, MAC/IPv4, storm suppression, user passwords, file management, log management, port statistics, link flapping protection, Modbus TCP monitoring
Security	User Privilege Classification, SSH Configuration, HTTPS Configuration, Access Control, SNMP, RMON, Port Limit Control, Port Security, NAS, ACL, Ethernet Services, RADIUS Server Authentication, TACACS + Server Authentication, Port Alarm, Temperature Alarm, Power Supply Alarm, MRP Alarm, Network Load Alarm
Switch Function	802.1Q VLAN, link aggregation, static aggregation, flow control, LACP
Unicast / Multicast	Multicast filtering, IGMP Snooping
Redundancy Technology	Ring, STP/RSTP/MSTP, ERPS

Troubleshooting	Log record, port mirroring, Ping, Traceroute, network cable diagnosis, SFP DDM
Time Management	NTP, Time Zone Configuration
Interface	100M copper port: 10/100Base-T(X) self-adaption, RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/ MDI-X Autotunning 100M fiber port: 100Base-X, optional SC/ST/FC Gigabit Combo port: 10/100/1000Base-T(X) self-adaptive RJ45, 1000Base-X SFP slot or forced 100Base-FX SFP slot CONSOLE port: CLI command line management port(RS-232), RJ45 Relay: support 2 relay alarm outputs, adopt 2 5-pin 5.08mm pitch terminal blocks, the relay occupies the right 2 pins, the current carrying capacity is 1A@30VDC or 0.3A@125VAC
Indicator	Power indicator, running indicator, alarm indicator, interface indicator
Switch Property	Transmission mode: store and forward MAC address: 8K Cache: 4.1Mbit Backplane bandwidth: 12.8Gbps Switch delay: <10μs
Power Supply	Adopt 2 5-pin 5.08mm pitch terminal blocks (power supply occupies the left 3 pins) ● DC Product 2 24/48VDC (18~72VDC), redundant power input, support non-polarity ● AC product 2 110/220VAC (85~264VAC/DC) redundant power inputs

	Model	No-load	Full-load
	IES5200-8T16F4GC-2LV	20.7W@48VDC	23.6W@48VDC
	IES5200-8T16F4GC-2HV	21.2W@220VAC	23.8W@220VAC
	IES5200-16T8F4GC-2LV	13.69W@48VDC	18.76W@48VDC
	IES5200-16T8F4GC-2HV	13.1W@220VAC	16.7W@220VAC
Power Consumption	IES5200-16T8F4GC-2HV	13.1W@220VAC	16.7W@220VAC
	IES5200-20T4F4GC-2LV	10.5W@48VDC	15.6W@48VDC
	IES5200-20T4F4GC-2HV	9.3W@220VAC	13.6W@220VAC
	IES5200-22T2F4GC-2LV	7.5W@48VDC	11.8W@48VDC
	IES5200-22T2F4GC-2HV	8.9W@220VAC	14.1W@220VAC
	IES5200-24T4GC-2HV	6.2W@220VAC	12.3W@220VAC

Working Environment	Operating temperature: -40~75℃
	Storage temperature: -40~85℃
	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:
	● IES5200-8T16F4GC-2LV: 2.411kg
	● IES5200-8T16F4GC-2HV: 2.658kg
	● IES5200-16T8F4GC-2LV: 2.361kg
	● IES5200-16T8F4GC-2HV: 2.608kg
	● IES5200-20T4F4GC-2LV: 2.370kg
	● IES5200-20T4F4GC-2HV: 2.671kg
	● IES5200-22T2F4GC-2LV: 2.363kg
	● IES5200-22T2F4GC-2HV: 2.682kg
	● IES5200-24T4GC-2LV: 2.223kg
	● IES5200-24T4GC-2HV: 2.566kg

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 60068-2-32
	Vibration: IEC 60068-2-6

Authentication	CE, FCC, RoHS

Warranty	5 years

Ordering Information

Model	100M Copper Port	100M Fiber Port	Gigabit COMBO Port	Power Supply
IES5200-8T16F4GC-2LV	8	16	4	2 24/48VDC (18~72VDC) redundant power inputs
IES5200-16T8F4GC-2LV	16	8	4	
IES5200-20T4F4GC-2LV	20	4	4	
IES5200-22T2F4GC-2LV	22	2	4	
IES5200-24T4GC-2LV	24	—	4	
IES5200-8T16F4GC-2HV	8	16	4	2 110/220VAC (85~264VAC/DC) redundant power inputs
IES5200-16T8F4GC-2HV	16	8	4	
IES5200-20T4F4GC-2HV	20	4	4	
IES5200-22T2F4GC-2HV	22	2	4	
IES5200-24T4GC-2HV	24	—	4	