ICS6424 Series

DIN-Rail/Wall Mounting

Gigabit/10 Gigabit Layer 3 Managed Industrial Ethernet Switch

- Support 4 optional 10 gigabit SFP slots, 8/12 gigabit copper ports and 4/8 gigabit SFP slots
- Adopt SW-Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 20ms
- Support dual power supply, input voltage: 12~48VDC
- Support -40～70℃ wide operating temperature range

CE FCC RoHS SW-Ring <20ms RECOVERY Industrial Grade Fanless Desig RPS

Introduction

ICS6424 series are gigabit/10 gigabit layer 3 managed industrial Ethernet switches. They provide gigabit copper port, gigabit SFP slot and 10 gigabit SFP slot (10 gigabit/gigabit self-adaption). They also adopt DIN-Rail/wall mounting, abundant numbers of interfaces and bandwidth of gigabit/10 gigabit combination to meet the application requirements of large-scale industrial network.

Network management system supports various network protocols and industrial standards, such as ARP, Static ND, VRRP, RIP, OSPF, MD5, BGP, STP/RSTP/MSTP, 802.1Q VLAN, QoS, IGMP Static Multicast, LLDP, Port Trunking, Port Mirroring, etc. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, 802.1X Authentication, Network Diagnosis, Rapid Configuration, Online Upgrading and so on, and supports CLI, WEB, Telnet, SNMP and other access methods. It can provide users with good experience with friendly design of network management system interface, simple and convenient operation.

The design of DIP switch could realize restoring to factory settings. 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, ALARM indicator will be bright and send out alarm, meanwhile, alarm device connected to the relay will send out alarm for rapid scene troubleshooting. Hardware adopts fanless, low power consumption, wide temperature and voltage design and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC. It can be widely used in smart grid, rail transit, smart city, safety city, new energy, aerospace, intelligent manufacturing, military project and other industrial fields.

Features and Advantages

- 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
- File management is convenient for rapid configuration and online upgrade of the device
- Log management records boot information, operation information and connection information
- Bandwidth management and flow control can reasonably distribute network bandwidth,

preventing unpredictable network status

- ⦿ Port statistics can be used for the port real time traffic statistics
- ⦿ ARP and Static ND could be used for Mac address resolution
- ⦿ User password can conduct user hierarchical management to improve the device management security
- ⦿ Radius Server Authentication, anti-attack control, ACL and 802.1X Authentication could strength the flexibility and security of network
- ⦿ NAT configuration could slow the space consumption of IP address
- ⦿ Relay alarm is convenient for troubleshooting of construction site
- ⦿ Storm suppression can restrain the broadcast, unknown multicast and unknown unicast
- ⦿ SSHD configuration could encrypt transmitted data, prevent DNS and IP spoofing
- ⦿ TELNET configuration and HTTPS configuration could ensure the access security of data
- ⦿ VLAN is used for simplifying network planning
- ⦿ Port Trunking and LACP can increase network bandwidth and enhance the reliability of network connection to achieve optimum bandwidth utilization
- ⦿ IGMP Snooping, GMRP and static multicast can be used for filtering multicast traffic to save the network bandwidth
- ⦿ Bandwidth management and flow control can reasonably distribute network bandwidth, preventing unpredictable network status
- ⦿ Port isolation could achieve port isolation in the same VLAN and save Vlan resources
- ⦿ SW-Ring and STP/RSTP/MSTP can achieve network redundancy, preventing network storm
- ⦿ Ping, Traceroute, Port Loopback and SFP DDM could achieve network diagnosis and troubleshooting
- ⦿ VRRP, RIP, OSPF, BGP could achieve dynamic routing configuration

Dimension

Unit:mm
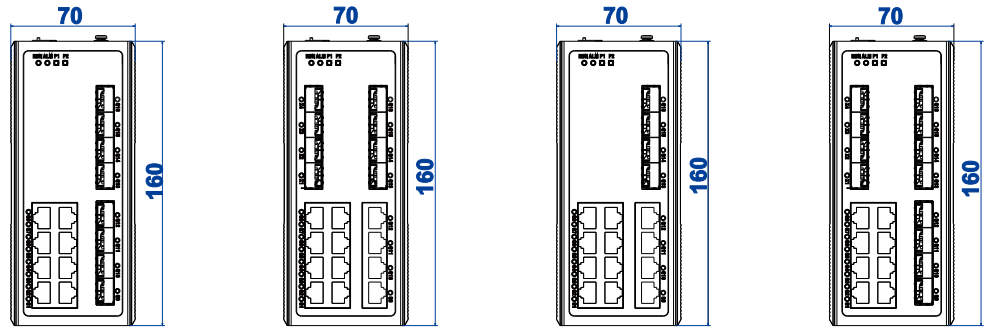
ICS6424-8GT8GS-2P48 **ICS6424-12GT4GS4XS-2P48** **ICS6424-12GT4GS-2P48** **ICS6424-8GT8GS4XS-2P48**
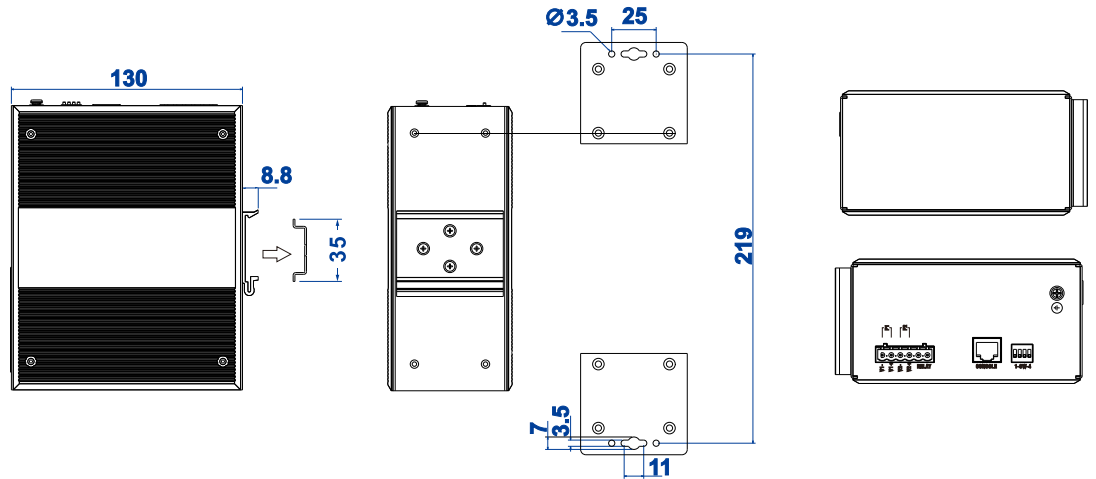
Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3ab for 1000Base-T IEEE 802.3z for 1000Base-X IEEE 802.3ae for 10GbE SFP+ IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1s for Multiple Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS IEEE 802.1X for 802.1X Authentication IEEE 802.1AB for LLDP IEEE 802.3ad for LACP
Management	SNMP v1/v2c/v3 Centralized Management of Equipment, RMON, Port Mirroring, QoS, LLDP, DHCP Server, DHCP Client, File Management, Log Management, Port Statistics, ARP and Static ND

Security	Classification of User Permissions, Radius Server Authentication, Anti-attack Control, ACL, 802.1X Authentication, Port Alarm, Power Supply Alarm, Storm Suppression, SSHD Configuration, Telnet Configuration, HTTPS Configuration
Switch Function	802.1Q Vlan, Static/Dynamic Port Aggregation, Bandwidth Management, Flow Control, Port Isolation
Unicast / Multicast	Static Multicast, GMRP, IGMP-Snooping
Redundancy Protocol	SW-Ring, STP/RSTP/MSTP
Troubleshooting	Ping, Traceroute, Port Loopback, SFP DDM
Routing Technique	VRRP, RIP, OSPF, BGP
Time Management	SNTP
Interface	Gigabit copper port: 10/100/1000Base-T(X), RJ45, Automatic Flow Control, Full/Half Duplex Mode, MDI/MDI-X Autotunning 10 gigabit SFP slot: 10GbE SFP+ Gigabit SFP slot: 1000Base-SFP Console port: CLI command line management port (RS-232), RJ45 Alarm port: 6-pin 5.08mm pitch terminal blocks, support 1 relay alarm outputs, current carrying capacity 1A@30VDC or 0.3A@125VAC
LED Indicator	Running Indicator, Port Indicator, Power Supply Indicator, Alarm Indicator
Switch Property	Transmission mode: store and forward MAC address: 16K Packet buffer size: 12Mbit Backplane bandwidth: 128G Switch time delay: < 10μs
Power Requirement	12~48VDC Support 2 DC power supply inputs support 3A overcurrent protection
Power Consumption	No-load: 9.6W@12VDC Full-load: 17.76W@12VDC
Environmental Limit	Operating temperature range: -40~70℃ Storage temperature range: -40~75℃ Relative humidity: 5%～95%（no condensation）
Physical Characteristic	Housing: IP40 protection, metal

Installation: DIN-Rail/wall mounting
Weight: 1070g
Dimension (W x H x D): 70mm×160mm×130mm

Industrial Standard	IEC61000-4-2 (ESD, electrostatic discharge) , Level 3 ● Air discharge: ±8kV ● Contact discharge: ±6kV IEC61000-4-4 (EFT, electrical fast transient) , Level 3 ● Power supply: ±2kV ● Signal: ±1kV IEC61000-4-5 (Surge),Level 3 ● Power supply: differential mode±1kV, common mode±2kV ● signal: differential mode±1kV, common mode±2kV Shock: IEC 60068-2-27 Free fall: IEC 60068-2-32 Vibration: IEC 60068-2-6
Certification	CE, FCC, RoHS
Warranty	5 years

Ordering Information

Available Models	10 Gigabit SFP Slot	Gigabit SFP Slot	Gigabit Copper Port	Power Supply Range
ICS6424-12GT4GS4XS-2P48	4	4	12	12~48VDC dual power supply
ICS6424-8GT8GS4XS-2P48	4	8	8	
ICS6424-8GT8GS-2P48	-	8	8	
ICS6424-12GT4GS-2P48	-	4	12	

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◀ Please scan our QR code for more details

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