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Make network communication more reliable



IEM615 Series

Embedded Mounting

5-Port 100M Layer 2 Managed Industrial Ethernet Switch Module with 2 Serial Ports or CAN Ports

- Support 5 100M fiber/copper ports, 2 serial ports or CAN ports
- Adopt SW-Ring patented technology, support single ring, coupling ring, chain, Dual-homing, automatic recovery time of network failure < 20ms
- Input voltage: 3.3VDC
- Support -40~75℃ wide operating temperature range



Introduction

IEM615 series is a 5-port 100M layer 2 managed industrial Ethernet switch module with 2 serial ports or CAN ports, which has the characteristics of high integration, small size, rich functions, simple and convenient operation. This series has 4 products to choose from, providing 2 serial ports or CAN ports and 5 100M ports, of which 5 100M ports can be configured with fiber port or copper port as needed; Using embedded installation mode, users can customize the PCB back plane specifications to choose any Ethernet interface types through the module pins, to meet the needs of different application sites.

Network management system supports various network protocols and industrial standards, such as STP/RSTP, 802.1Q VLAN, QoS, Static Multicast, LLDP, Port Mirroring. It also possesses complete management functions, including Port Configuration, Port Statistics, Access Control, Network Diagnosis, Rapid Configuration, Online Upgrading and so on; Integrated serial server and CAN server functions, each serial port and CAN port support 4 TCP or UDP session connections and multiple work modes such as TCP Server, TCP Client and UDP; supports CLI, WEB, Telnet, SNMP and other access methods. Network management system could bring you great user experience through its friendly interface design and easy and convenient operation.

Hardware adopts fanless, low power consumption, wide temperature 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, intelligent manufacturing and other industrial fields.

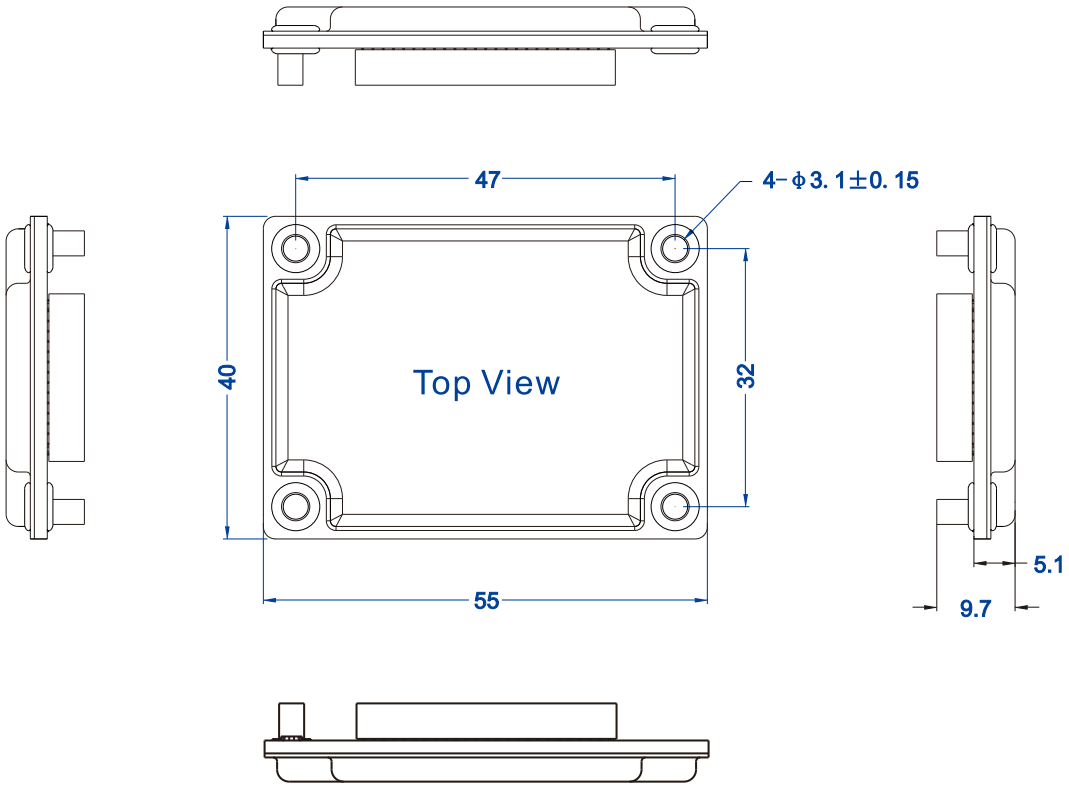
Features and Benefits

- SNMPv1/v2c 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
- User password can conduct user hierarchical management to improve the device management security
- Relay alarm is convenient for troubleshooting of construction site
- VLAN is used for simplifying network planning

- Static multicast can be used for filtering multicast traffic to save the network bandwidth
- SW-Ring and STP/RSTP can achieve network redundancy, preventing network storm
- Support multiple serial port modes: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP
- Support multiple CAN port modes: TCP Server, TCP Client, UDP, TCP auto, Realcom, advanced TCP Server and advanced UDP

Dimension

Unit: mm



Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid Spanning Tree Protocol IEEE 802.1Q for VLAN IEEE 802.1p for CoS

Management	SNMP v1/v2c Centralized Management of Equipment, Port Mirroring, QoS, LLDP, DHCP Client, File Management, Port Statistics
Security	Classification of user permissions, port alarm, power alarm
Switch Function	802.1Q VLAN, bandwidth management, flow control
Unicast / Multicast	Static Multicast
Redundancy Technology	SW-Ring, STP/RSTP
Interface	100M port: 10/100Base-T(X) or 100Base-FX, fiber port or copper port Console port: TTL level serial data Alarm interface: support 2 alarm information input and output
Serial Port	Interface type: Full signal TTL level serial port (RS-232/485/422 optional) Baud rate: 300-115200bps Data bit: 8bits Parity bit: None, Even, Odd Stop bit: 1bit, 2bit
CAN Port	Interface type: TTL level CAN port Baud rate: 5-1000kbps
Indicator	External indicator, running indicator, interface indicator
Switch Property	Transmission mode: store and forward MAC address: 2K Buffer: 0.5Mbit Backplane bandwidth: 1.2G Switch time delay: <10μs
Power Supply	3.3VDC（±5%）
Power Consumption	Power: ＜2W
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ Relative humidity: 5%～95%(no condensation)
Mechanical Structure	Installation: embedded installation (with conducting strip, can be

	equipped with heat sink) Dimension (W x H x D): 55mm×9.7mm×40mm
Warranty	5 years

Ordering Information

Available Models	100M Port (Optional Fiber/Copper Port)	Serial Port (RS-232/485/422 Optional)	CAN Port	Power Supply
IEM615-2D	5	2	—	3.3VDC (±5%)
IEM615-1D-1C	5	1	1	
IEM615-2C	5	—	2	
IEM615-2D-605	5	2	—	

Note: The IEM615-2D-605 module is compatible with the backplane of the IEM605-2D module and can be used in conjunction with it.

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