3onedata
Make network communication more reliable



IEM6200-8T2G-4D2C

Embedded Mounting

Multi-service Access Layer 2 Managed Industrial Ethernet Switch Module

- Support 4 serial ports, 2 CAN ports, 8 100M fiber ports or copper ports (optional) and 2 Gigabit fiber ports
- Adopt Ring patent technology, support single ring, coupling ring, chain ring, Dual-homing ring network function, automatic recovery time of network failure < 20ms
- Main board input voltage: 12~48VDC, module power supply: 3.3VDC
- Support -40~75℃ wide operating temperature range



Introduction

IEM6200-8T2G-4D2C is a multi-service access layer 2 managed embedded industrial Ethernet switch module, which has the characteristics of high integration, small size, rich functions, simple and convenient operation. The product provides 4 serial ports, 2 CAN ports, 8 100M and 2 Gigabit Ethernet ports; Using embedded installation mode and choosing 100M Ethernet port types can 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, Port Trunking, 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 port server and CAN server functions, each serial port and CAN port supports 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

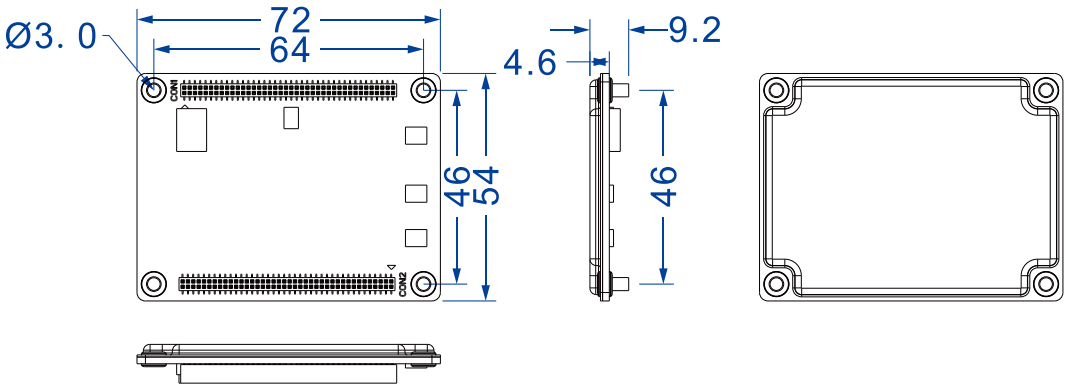
- SNMPv1/v2c is used for network management of various levels
- Port mirroring can conduct data analysis and monitoring, which is convenient for online debugging
- QoS supports real-time traffic classification and priority setting
- LLDP can achieve automatic topology discovery, which is convenient for 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
- Storm suppression can restrain broadcast, unknown multicast and unicast
- 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
- SW-Ring and STP/RSTP can achieve network redundancy, preventing network storm
- Support multiple serial port work modes: RealCom Mode, Reverse RealCom Mode, TCP Server Mode, TCP Client Mode, UDP Server Mode, UDP Client Mode, UDP Rang Mode, Pair Slave Mode, Pair Master Mode, Telnet Mode, Reverse Telnet Mode, Disable Mode
- Support multiple CAN port work modes: TCP Server, TCP Client, UDP Server, UDP Client and UDP Rang

Dimension

Unit: mm



Specification

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T 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,

	Threshold Alarm, Storm Suppression
Switch Function	802.1Q Vlan, Static Port Aggregation, Bandwidth Management, Flow Control
Unicast / Multicast	IGMP-Snooping
Redundancy Technology	Ring, STP/RSTP
Interface	100M port: 10/100Base-T(X) or 100Base-FX, fiber port or copper port Gigabit fiber port: 1000Base-X Console port: TTL level serial data Alarm interface: support 2 alarm information outputs
Serial Port	Interface type: 4 full signal TTL level serial port (RS-232/485/422 optional) RS-485 signal: D+, D-, GND RS-232 signal: DSR, RXD, RTS, TXD, CTS, DTR RS-422 signal: T+, T-, R+, R-, GND Baud rate: 300~115200bps Data bit: 5bit, 6bit, 7bit, 8bit Parity bit: None, Even, Odd, Space, Mark Stop bit: 1bit, 1.5bit, 2bit Directional control: RS-485 adopts Automatic Data Direction Control technology Load capacity: RS-485 supports 32-point polling (customizable 128 points)
CAN Port	Interface type: 2 TTL level CAN ports CAN signals: CAN+, GND, CAN- Protocol support:CAN2.0A, CAN2.0B Work mode: normal, self-test, listen only Work pattern: two-wire half duplex Baud rate: 5kbps~1000kbps Load capacity: support concurrent transmitting of 110 nodes
Indicator	External indicator, running indicator, interface indicator
Switching Property	Transmission mode: store and forward MAC address: 4K Cache: 2Mbit Backplane bandwidth: 9.6G Switch time delay: <10μs

Power Supply	Main board input voltage: 12~48VDC, module power supply: 3.3VDC
Power Consumption	No-load: 4.0W@12VDC Full-load: 5.5W@12VDC
Working Environment	Operating temperature: -40~75℃ Storage temperature:-40~85℃ Relative humidity: 0%～95% (no condensation)
Physical Characteristic	Installation: embedded installation (with conducting strip, can be equipped with heat sink) Dimension (W x H x D): 72mm×9.2mm×54mm
Warranty	5 years

Ordering Information

Model	100M Port (optional fiber/copper port)	Gigabit Fiber Port	Serial Port	CAN Port	Power Supply
IEM6200-8T2G-4D2C	8	2	4	2	3.3VDC

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

Please scan our QR code for more details

*Product pictures and technical data in this datasheet are only for reference. Updates are subject to change without prior notice. The final interpretation right is reserved by 3onedata.