### **CS-CANET200**

2 CAN-bus to 1x100M Ethernet Wall Mount CAN Server



- Support 1x100M Ethernet port, 2 CAN ports
- Support CAN terminal device networking and protocols such as CAN to UDP, TCP, Modbus, HTTPD, WebSocket, etc.
- Support CAN relay to achieve transparent data transmission between CAN and other CAN ports
- External independent hardware watchdog design to prevent crashes
- Industrial DC9~36V input and support reverse connection protection
- High-strength metal shell, IP40 protection ,fanless design
- -40°C to +85°C working temperature

#### **Product Description**

CS-CANET200 is a wall mount CAN server with 2 isolated CAN to Ethernet conversion. It features a 32-bit Arm Cortex-M7 core with a high clock frequency of up to 400MHz and an external hardware watchdog design. It provides high-level ESD, Surge, and EFT protection for power supply, network ports, and CAN ports, offering strong interference resistance. This product is specifically designed for industrial users to enable bidirectional transparent transmission between CAN-bus and Ethernet, expanding the scope of CAN-bus networks.

CS-CANET200 supports 2\*CAN interfaces and 1 Gigabit Ethernet port, with isolation between each CAN interface at 2kVAC. Users can freely set the communication baud rate for each CAN from 5Kbps to 1000kbps, enabling interconnection of CAN networks with different communication baud rates. It integrates a TCP/IP protocol stack internally, allowing bidirectional transparent transmission between the 2\*CAN and Ethernet. It also supports CAN relay functions for network expansion, increasing the number of nodes and extending communication distances. It can be cascaded infinitely, enabling long-distance communication.

The product offers powerful ID filtering capabilities, allowing users to select allowed or prohibited ID ranges for selective data forwarding. This significantly reduces the bus load on the channels, improves data isolation, and enhances data utilization efficiency.

Industrial-grade CAN server supports various web-based management functions, including CAN/network operating modes, port information, network addresses, user passwords, system information, and system management. It also supports multiple conversion modes such as UDP/UDP Multicast, TCP Client/Server, Modbus TCP Slave, Relay, Pair Connection Master/Slave, HTTPD Client, WebSocket Client, enabling CAN to Ethernet or Modbus TCP protocol conversion.

In terms of core components, the product is designed with an industrial-grade quality scheme, offering advantages such as wide temperature and voltage ranges, lightning protection, electromagnetic interference resistance, high reliability, high performance, and suitability for operation in harsh environments. It can be used in various industries, including fire alarms, industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, coal mining, petroleum, chemical engineering, new energy, and more. It is used for remote field data collection, remote monitoring, on-site control, making it an essential industrial communication product for the development of the Industrial Internet of Things (IIoT).

#### **Product Features**

- Utilize a 32-bit ARM Cortex-M7 core with a high operating frequency of up to 400MHz
- CAN ports support selectable baud rates ranging from 5kbps to 1000kbps
- Support CAN standard frame ID and extended frame ID filtering
- Support UDP and UDP Multicast modes, enabling point-to-point, point-to-multipoint, or multipoint-to-multipoint communication via UDP protocol for fast and efficient data transfer
- Support TCP Client/Server mode, establishing session connections through TCP protocol, supporting up to 4 concurrent session connections
- Support Pair Connection Master/Slave mode, allowing devices to be used in pairs with straightforward operation
- Support Modbus TCP Slave mode, enabling the conversion between Modbus TCP and CAN bus protocols through read and write command mapping
- Support Relay Mode, allowing data forwarding between CAN ports
- Support HTTPD Client mode, enabling GET or POST operations with an HTTPD server
- Support WebSocket Client mode, facilitating bidirectional communication with WebSocket servers
- Support various packetization mechanisms, converting CAN data into Ethernet data packets based on data length or time, meeting different network real-time requirements
- Support registration packets and heartbeat packets for connection validation and connection status detection
- Provide statistics on the number of sent and received frames on bus ports and network connection information
- Support user management with different access permissions
- Enable online restart of CAN ports, device restart, factory settings restoration, and firmware upgrades

### **Technical Specifications**

Software			
Network Protocol	IP, TCP/UDP, ARP, ICMP, DHCP, DNS, HTTP		
IP Obtaining Method	Static IP/DHCP		
User Configuration	Web Configuration		
Simple Transparent Transmission	TCP Client/TCP Server/UDP /UDP Multicast/Pair Connection/WebSocket Client/HTTPD Client		
Modbus	CAN to Modbus TCP		
Network connection count	A single bus port supports up to 4 network connections.		
Network Cache	Send:16Kbyte; Receive:16Kbyte		
Transmission Delay(Average)	<10ms		
Heartbeat Package	Support (Client Only)		
Registration Package	Support (Client Only)		
Packet Length	CAN:0~50 frames		
Packet Interval	0~255ms		
CAN Relay	Support		
CAN Transmit/Receive	Send: 6000 frames per second; Receive: 8000 frames per second		
CAN ID Filtering	Support		
CAN Buffer	Send: 200 complete data packets per channel; Receive: 200 complete data packets per channel		
Interface			
100M Copper Port	1*10/100Base-T(X) port auto sensing RJ45 port, full/half duplex, auto MDI/MDI-X		
CAN	Ports: 2*CAN Connection Method: Terminal blocks with 5.08mm spacing Baud Rate: 5kbps to 1000kbps Termination Resistance: Built-in 120Ω termination resistance,		

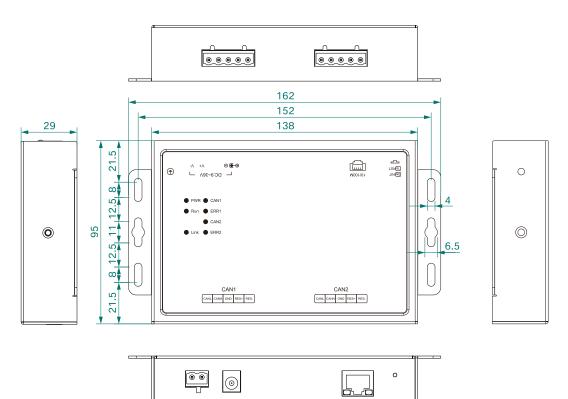
	can be connected via terminal blocks Isolation Protection: 2kVAC		
Button	One-button restart or factory reset button		
Status LED	Power indicator, operation indicator, Ethernet port indicator, CAN indicator, ERR indicator		
Power Supply			
Input Voltage	DC9~36V		
Power Consumption	< 0.8W@DC12V(full load)		
Connection	2-pin 5.08mm pitch terminal blocks or Φ2.5mm DC round head		
Physical Characteristics			
Dimensions	162×95×29 (mm) (mounting brackets included)		
Installations	Wall mount		
IP Code	IP40		
Working Environment			
Operating Temp	-40°C~+85°C		
Storage Temp	-40°C~+85℃		
Relative Humidity	5%~95% (non-condensing)		
Industry Standard			
EMC	<ul> <li>IEC 61000-4-2 (ESD - Electrostatic Discharge):</li> <li>Contact Discharge: ±8kV</li> <li>Air Discharge: ±15kV</li> <li>IEC 61000-4-5 (Surge):</li> <li>Power Supply: Common Mode ±4kV, Differential Mode ±2kV</li> <li>CAN: Common Mode ±4kV, Differential Mode ±2kV</li> <li>Ethernet Port: Common Mode ±6kV, Differential Mode ±2kV</li> <li>IEC 61000-4-4 (EFT - Electrical Fast Transient):</li> <li>Power Supply: ±4kV</li> </ul>		



	Communication Port: ±4kV
Certification	CE, FCC, RoHS

### Dimensions

Unit: mm





#### **Ordering Information**

Standard Model	100M Copper Port	CAN	Input Voltage
CS-CANET200	1	2	DC9~36V



#### COME-STAR COMMUNICATION(WUHAN) CO., LTD.

Address: Puneng Industrial Park, Fenghuang Garden 1st Road, East Lake High-Tech Development Zone, Wuhan, China. Tel: +86-027-59257958 Mail: info@come-star.com Official site: www.come-star.com

Copyright © Come-Star All rights reserved