CS-CANET300

Wall-Mount CAN Server with 1 x CAN-bus port + 1 x RS232/485 port to 1 x 10/100M copper Port

- 1 x CAN port, 1 x RS232/485 serial port, 1 x 100M copper port
- Support networking between CAN and serial terminal devices, supporting CAN-to-serial conversion to UDP, TCP, Modbus, HTTPD, WebSocket, and other protocols
- Support CAN to RS232/485 conversion with multiple modes: transparent, transparent with identifiers, format conversion, and Modbus conversion
- Feature external independent hardware watchdog design to prevent system lockups
- Industrial-grade DC9~36V input with reverse polarity protection
- High-strength metal casing with IP40 protection
- -40°C to +85°C operating temperature range

Product Description

The CS-CANET300 is a wall-mount CAN-to-Ethernet server featuring a 32-bit Arm Cortex-M7 core operating at up to 400MHz. It incorporates an external hardware watchdog design and provides 1 x CAN port, 1 x RS232/485 serial port, and 1 x 100M copper port. Power, network ports, and CAN interfaces feature high-grade ESD, surge, and EFT protection for strong anti-interference capability. It enables mutual conversion between CAN-bus, serial ports, and Ethernet, extending transmission distances for CAN-bus and serial interfaces while expanding network coverage.

The industrial-grade CAN server supports web-based configuration for multiple network management functions, including CAN/serial/network operating modes, port information, network addresses, user passwords, system information, and system administration. Supports multiple conversion modes including UDP/UDP Multicast, TCP Client/Server, Modbus TCP Slave, Modbus RTU Master/Slave, Modbus ASCII Master/Slave, Pair Connection Master/Slave, HTTPD Client, and WebSocket Client, enabling CAN-to-serial-to-Ethernet or Modbus TCP protocol conversion. Supports transparent conversion, transparent conversion with identification, format conversion, Modbus conversion, and other modes to achieve CAN-to-serial or Modbus RTU protocol conversion. Featuring industrial-grade design in core components, the product offers wide temperature/voltage range, lightning surge protection, electromagnetic interference

resistance, high reliability, and high performance—ideal for harsh environments. Suitable for fire alarms, industrial monitoring, traffic management, meteorology, water treatment, environmental monitoring, coal mining, petroleum, chemical processing, and new energy sectors. It facilitates remote field data acquisition, remote monitoring, and field control, making it an indispensable industrial communication product for the development of the Industrial Internet of Things.

Product Features

- Feature a 32-bit ARM Cortex-M7 core operating at up to 400MHz;
- CAN port supports selectable baud rates from 5kbps to 1000kbps; serial port supports selectable baud rates from 600bps to 460800bps;
- Support UDP and UDP Multicast modes, enabling fast and efficient point-to-point, point-to-multipoint, or multipoint-to-multipoint communication via UDP protocol;
- Support TCP Client/Server mode, establishing session connections via TCP protocol with support for up to 4 concurrent sessions;
- Support Pair Connection Master/Slave mode, allowing devices to operate in paired configurations for simplified operation;
- Support Modbus TCP Slave mode, enabling Modbus TCP to CAN bus protocol conversion through read/write command mapping;
- Support Modbus RTU/ASCII Master/Slave mode, enabling Modbus TCP to Modbus RTU/ASCII protocol conversion;
- Support CAN to Serial mode, providing transparent conversion, transparent conversion with identifiers, format conversion, or Modbus conversion for CAN to serial port conversion;
- Support HTTPD Client mode for GET or POST operations with HTTPD servers;
- Support WebSocket Client mode for bidirectional communication with WebSocket servers;
- Support multiple packet segmentation mechanisms, converting CAN data into Ethernet packets based on data length or time to meet diverse network real-time requirements;
- Support frame header/trailer mode, enabling serial port filtering based on start/end bytes;
- Support Modbus slave pre-reading, automatically learning commands and pre-fetching data for rapid response;
- Support registration packets and heartbeat packets for connection verification and status monitoring;
- Support filtering based on standard CAN frame IDs and extended frame IDs;
- Support statistics for transmitted/received frames and network connection information via bus port;
- Support multi-level user permission management;
- Support online restart of CAN and serial ports, device reboot, factory reset, and firmware upgrade.

Technical Specifications

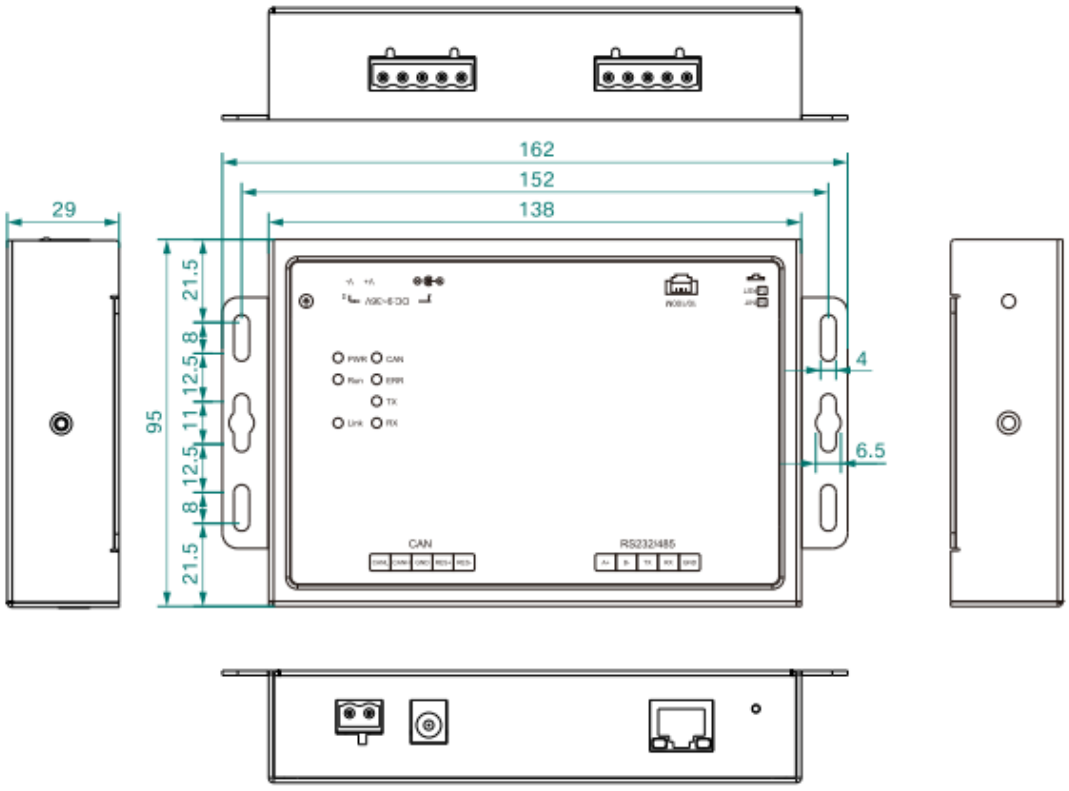
Software	
Network Protocol	IP, TCP/UDP, ARP, ICMP, DHCP, DNS, HTTP
IP Obtaining Method	Static IP/DHCP
User Configuration	Web Configuration
Simple Transparent Transmission Modes	TCP Client / TCP Server / UDP / UDP Multicast / Pair Connection / WebSocket Client / HTTPD Client
Modbus Functions	CAN to Modbus TCP / CAN to Serial Modbus / Serial Modbus RTU/ASCII to Modbus TCP
Network Connections	Up to 4 network connections supported per bus port
Network Buffer	Transmit: 16Kbyte; Receive: 16Kbyte
Average Transmission Latency	<10ms
Heartbeat Packets	Supported (Client only)
Registration Packets	Supported (Client only)
Packet Length	CAN: 0~50 frames; Serial: 0~1460 bytes
Packet Interval	0~255ms
CAN Send/Receive Capacity	Transmit: 6000 frames/sec; Receive: 8000 frames/sec
CAN ID Filtering	Supported
CAN Buffer	Transmit: 200 complete packets (per channel); Receive: 200 complete packets (per channel)
Serial Port Buffer	Transmit: 1.5Kbyte; Receive: 1.5Kbyte
RFC2217	Supported
Interface	
100M Copper Port	1 x 10/100Base-T(X) auto-negotiating RJ45 port, full/half-duplex, auto MDI/MDI-X

CAN	Interface quantity: 1 x CAN Connection Method: 5-pin terminal block with 5.08mm pitch Baud Rate: 5kbps to 1000kbps Termination Resistance: Built-in 120Ω termination resistance, can be connected via terminal blocks Isolation Protection: 2kVAC
Serial Port	Port Type: 1x RS232/485 Connection method: 5-pin terminal block with 5.08mm pitch Baud rate: 600bps~460800bps Data bits: 7bit, 8bit Stop bit: 1bit, 2bit Check digit: None, Odd, Even Isolation protection: 2kVAC
Button	One-button restart or factory reset button
Status LED	Power indicator, Run indicator, Ethernet interface indicator, CAN indicator, ERR indicator, Serial port transmit/receive data indicators
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°C
Relative Humidity	5%~95% (non-condensing)
Industry Standard	

EMC	IEC 61000-4-2 (ESD): Contact discharge ±8kV, air discharge ±15kV IEC 61000-4-5 (Surge): Power supply: Common mode ±4kV, Differential mode ±2kV; CAN: Common mode ±4kV, Differential mode ±2kV; Ethernet port: Common mode ±6kV, Differential mode ±2kV IEC 61000-4-4 (EFT): Power supply: ±4kV; Communication port: ±4kV

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Copper Port	CAN	RS232/RS485	Input Voltage
CS-CANET300	1	1	1	DC9~36V

Contact Us

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: sales@come-star.com

Official site: www.come-star.com

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