MW-CANET300

1*CAN-bus + 1*RS232/485 to 1*100M Ethernet CAN Server

- Support 1 100M Ethernet port, 1 CAN port, and 1 RS232/485 serial port, meeting various industrial bus or network field requirements
- Support networking between CAN and serial terminal devices, supporting protocols such as CAN to UDP, TCP, Modbus, HTTPD, WebSocket, etc
- Support CAN to RS232/485 conversion with various modes including transparent conversion, transparent conversion with identifiers, format conversion, Modbus conversion, etc
- External independent hardware watchdog design to prevent crashes
- Provide industrial-grade DC power supply with DC9~36V input and reverse connection protection
- High-strength metal enclosure, IP40 protection level, fanless design for heat dissipation, the operating temperature from -40°C to +85°C

Product Description

MW-CANET300 is a wall mount CAN server that converts CAN and serial communication to Ethernet. 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 1 CAN port, 1 RS232/485 serial port, and 1 100M Ethernet port. The power supply, network port, and CAN port all have high-level ESD, Surge, and EFT protection, ensuring strong interference resistance. It can enable the conversion between CAN-bus, serial communication, and Ethernet, further extending the transmission distance of CAN-bus and serial communication and expanding the network coverage.

Industrial-grade CAN server supports web-based configuration with various network management functions, including CAN/serial/network operating modes, port information, network addresses, user passwords, system information, and system management. It supports multiple conversion modes such as UDP/UDP Multicast, TCP Client/Server, Modbus TCP Slave, Modbus RTU Master/Slave, Modbus ASCII Master/Slave, Pair Connection Master/Slave, HTTPD Client, WebSocket Client, and more, enabling CAN and serial communication to Ethernet or Modbus TCP protocol conversion. It also supports various conversion modes like transparent conversion, transparent conversion with identifiers, format conversion, and Modbus conversion, allowing CAN to serial communication or Modbus RTU 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)

Features and Benefits

- 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, while serial ports support selectable baud rates from 600bps to 460800bps
- Support UDP and UDP Multicast modes, allowing for point-to-point, point-to-multipoint, or multipoint-to-multipoint communication via the UDP protocol for fast and efficient data transfer
- Support TCP Client/Server modes, establishing session connections through the TCP protocol, supporting up to 4 concurrent session connections
- Support Pair Connection Master/Slave modes, enabling devices to be used in pairs with straightforward operation
- Support Modbus TCP Slave mode, achieving conversion between Modbus TCP and CAN bus protocol through read and write command mapping
- Support Modbus RTU/ASCII Master/Slave modes, enabling conversion between Modbus TCP and Modbus RTU/ASCII protocols
- Support CAN to Serial mode, offering transparent conversion, transparent conversion with identifiers, format conversion, or Modbus conversion for CAN to serial communication
- Support HTTPD Client mode, allowing communication with HTTPD servers for GET or POST operations
- 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 to meet different network real-time requirements
- Support frame header and frame tail modes, allowing serial ports to filter data frames based on the start and end bytes of a frame
- Support Modbus slave pre-fetching, automatic command learning, and pre-fetching data for fast response
- Support registration packets and heartbeat packets for connection validation and connection status detection
- Support CAN standard frame ID and extended frame ID filtering
- 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 and serial ports, device restart, factory settings restoration, and firmware upgrades

Specification

Software	
Network Protocol	IP, TCP/UDP, ARP, ICMP, DHCP, DNS, HTTP
IP Obtaining Method	Static IP/DHCP
User Configuration	Web
Simple Transparent Transmission	TCP Client, TCP Server, UDP, UDP Multicast, Pair Connection, WebSocket Client, HTTPD Client
Modbus	CAN to Modbus TCP, CAN to Serial Modbus, Serial Modbus RTU/ASCII 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; Serial: 0~1460 bytes
Packet Interval	0~255ms
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
Serial Port Cache	Send: 1.5Kbytes, Receive: 1.5Kbytes
RFC2217	Support
Interface	
100M Copper Port	1*10/100Base-T(X) port auto sensing RJ45 port, full/half duplex, auto MDI/MDI-X
CAN	Ports:1*CAN Connection Method: 5-pin 5.08mm pitch terminal blocks Baud Rate: 5kbps to 1000kbps Termination Resistance: Built-in 120Ω termination resistance, can be connected via terminal blocks Isolation Protection: 2kVAC

Specification

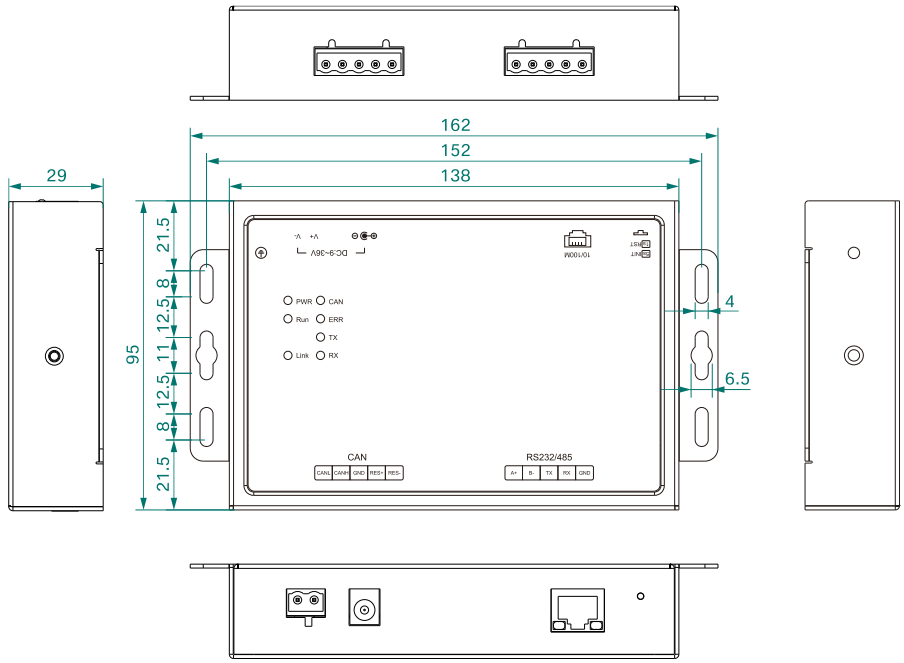
Serial Port	Serial Port : 1*RS232/485 Connection Method: 5-pin 5.08mm pitch terminal blocks Baud Rate: 600bps~460800bps Data Bits: 7-bit, 8-bit Stop Bits: 1-bit, 2-bit Parity: None, Odd, Even
Button	One-button Restart or Factory Reset Button
Status LED	Power Indicator, Operation Indicator, Ethernet Interface Indicator, CAN Indicator, ERR Indicator, Serial Port Transmit and Receive Data 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℃~+85℃
Storage Temp	-40℃~+85℃
Relative Humidity	5%~95% (non-condensing)
Industry Standard	

Specification

EMC	IEC 61000-4-2 (ESD - Electrostatic Discharge): ● 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 - Electrical Fast Transient): ● Power Supply: ±4kV ● Communication Port: ±4kV
Certification	CE, FCC, RoHS

Dimensions

Unit: mm



Ordering Information

Standard Model	100M Copper	CAN	RS232/485	Input Voltage
MW-CANET300	1	1	1	DC9~36V

Contact Us

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