



## CANopen Slave Gateway

**USR-CAN518**



**CANopen Slave to Modbus TCP**

**CANopen Slave to Modbus RTU**



**Intelligent Logistics AGV**



**Industrial Automation**



**Water/Wind/Solar Engineering**

## Product Overview

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USR-CAN518 is a CANopen slave gateway independently developed by PUSR. It features 1 CAN interface, 1 RS485 interface, and 1 standard 10/100M Ethernet interface. The device supports CANopen to Modbus conversion, making it easy to connect Modbus slave devices on industrial sites to CANopen master devices such as PLCs.

This gateway comes with a PC configuration tool, allowing flexible configuration of relevant functions. The product offers high speed, low latency, stable performance, simple operation, and high cost-effectiveness. Designed to industrial standards, it features comprehensive isolation with CAN port isolation up to 3000V. It supports an industrial wide temperature range of -40°C to 85°C, wide voltage DC 9-36V power supply, and robust hardware protection. The arbitration baud rate ranges from 5 kbps to 1 Mbps; the data phase baud rate ranges from 100 kbps to 5 Mbps. Having passed multiple rigorous environmental tests, it adapts to various industrial scenarios and operates reliably even in harsh conditions. The product comes with a pre-installed DIN rail for easy and quick installation, suitable for various industrial applications.

## Key Feature

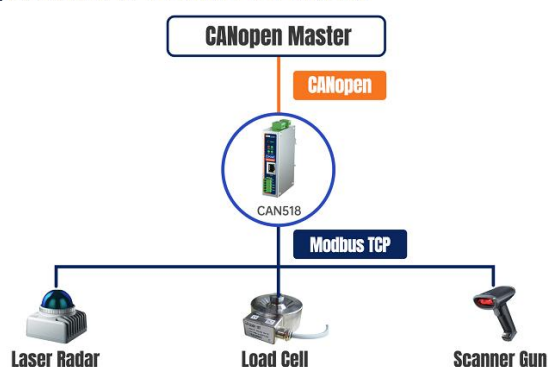
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- Aluminum alloy housing, IP40 protection reduces dust impact;
- Industrial wide temperature range (-40°C to +85°C) withstands extreme temperatures;
- Wide voltage input DC 9-36V with reverse polarity protection;
- EMC level 3 protection as per national standards; fully isolated communication/power/interface protection for harsh industrial environments;
- Standard 35mm DIN rail mounting;
- 1 standard Ethernet port for data communication with Modbus TCP slave devices;
- 1 RS485 serial port with opto-isolator;
- 1 standard CAN port for connecting to CANopen master;
- 1 Type-C port for debugging;
- IP address, port, slave ID, and register information all configurable
- Supports CANopen slave to Modbus RTU/TCP master conversion
- Supports standard CAN2.0 protocol
- Supports 128 TPDO and 128 RPDO
- Each PDO group supports up to 16 mapping variables
- Supports CAN baud rates from 5k to 1Mbps, custom baud rates allowed
- Supports parameter configuration via PC tool
- Supports network AT command configuration
- Supports firmware upgrade via PC tool for easier updates

## Application

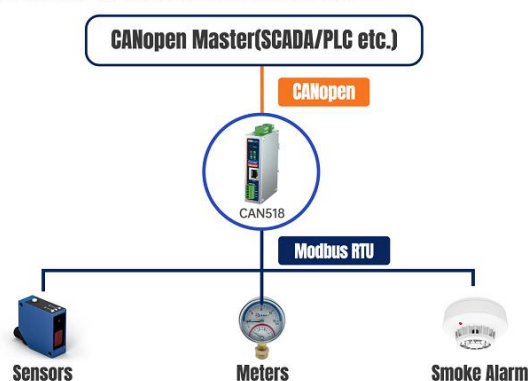
### CANopen (CAN518)

#### CANopen Slave to Modbus TCP Master



### CANopen (CAN518)

#### CANopen Slave to Modbus RTU Master



## Ordering Guide

Model	Description
USR-CAN316	CAN(FD) to RS485/RS232, CAN(FD) to Modbus RTU, without isolation
USR-CAN315	CAN(FD) to Ethernet, CAN(FD) to Modbus TCP, without isolation
<b>USR-CAN518</b>	CANopen slave to Modbus TCP/RTU master
USR-CAN528	CAN(FD) to RS485/Fiber-optic/Ethernet, dual CAN ports, CAN(FD) to Modbus RTU/TCP, MQTT, with isolation

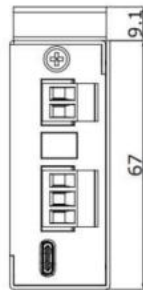
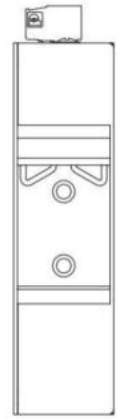
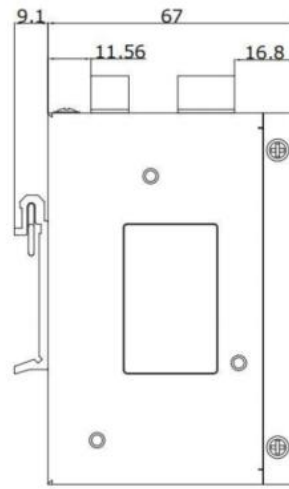
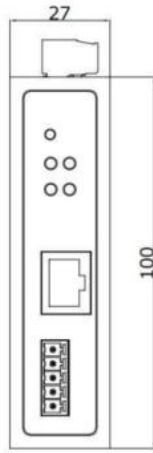
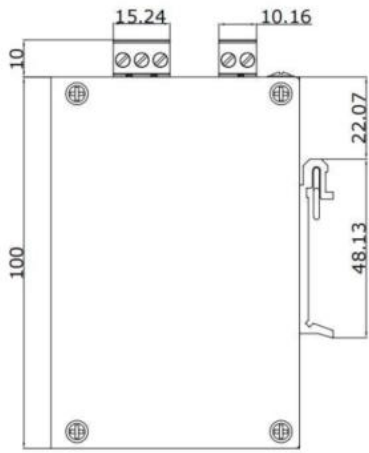
## Specification

Power supply	
Input voltage	DC 9 ~ 36 V, reverse polarity protection
Connector	2-PIN 5.08 terminal blocks
Current	Idle mode: avg 43.97mA/12V, max 45.76mA/12V Working mode: avg 46.26mA/12V, max 48.35mA/12V
Physical characteristics	
Housing	Aluminum
Dimension	110*27*85.6 mm(Including terminal blocks)
Mounting	DIN rail mounting
Reload	Long press to restore to factory settings
Ethernet	
Ethernet port	RJ45, 100/1000Mbps, Auto MDI/MDIX
Default IP	Static: 192.168.0.7
RS485 Serial port	
Pin	A, B, G
Baud rate	600-230.4K(bps)
Data bit	7, 8
Parity bit	None, Odd, Even

Stop bit	1、2
<b>CAN port</b>	
Pin	H: CAN_H signal L: CAN_L signal G: Ground
Baud rate	5k~1000K bps, supports user-defined baud rate
Terminal register	Built-in 2x 120Ω CAN bus termination resistors
<b>Other Interface</b>	
Indicator	PWR, WORK, CAN, COM
Reload	Holding on for 3 -15s to reset to factory settings
Type-C	Debugging port
<b>Physical parameters</b>	
Installation	DIN rail mounting
Housing	Aluminum case
Dimension	110*27*76.1mm (Including DIN rail kit and terminal blocks)
<b>EMC protection</b>	
ESD	Air discharge: 8 kV Contact discharge: 6 kV
Surge	Power: differential mode@1KV, common mode@2KV CAN: common mode@1KV RS485/Ethernet: common mode@1KV
EFT	Power: 2KV RS485/Ethernet: 1KV
Isolation	Isolation for power supply, CAN ports, serial port, and CAN port
<b>Operating environment</b>	
Operating Temperature	-40~85°C
Storage Temperature	-40~105°C
Operating Humidity	5% ~ 95% RH(non-condensing)
Storage Humidity	5% ~ 95% RH(non-condensing)

## Dimensions

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## Purchase & Support

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Official Website: [www.pusr.com](http://www.pusr.com)

Official Shop: [shop.usriot.com](http://shop.usriot.com)

Technical Support: [h.usriot.com](http://h.usriot.com)

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