

# **J1939 Series Products**

### J1939/Modbus RTU Slave Gateway

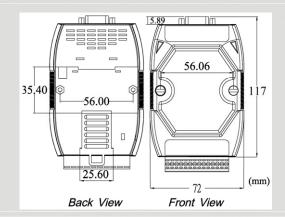








GW-7228



#### **Dimensions**

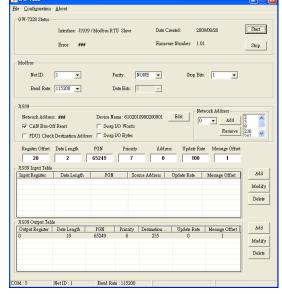
The GW-7228 is a solution that provides a protocol conversion between J1939 and Modbus RTU. For J1939 network, the GW-7228 supports PDU1, PDU2, broadcast and destination specific type of J1939 messages. From the view of Modbus RTU network, the GW-7228 is a Modbus RTU slave to reply the request from Modbus RTU master. We provide Utility software for users to configure the parameters of J1939 / Modbus RTU of the GW-7228. The application fields can be Diesel power-train applications, In-Vehicle networks for trucks and buses, etc.

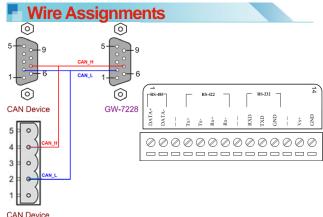
#### **Features**

- Provide PWR / J1939 / MODBUS indication LED
- Built-in jumper to select 120 ohm terminal resister
- Watchdog inside
- Transmission and reception of all types of J1939 messages, including PDU1, PDU2, broadcast and destination specific.
- J1939 Transport Protocol for transmission and reception of large messages (9 - 1785 bytes).
- Support BAM of Connection Management Message.
- Network addresses management.
- Support RS-232, RS-485 and RS-422 interfaces.
- Support Modbus RTU slave protocol.
- Configurable for Modbus Network ID(1~250).
- Configurable baud rates of 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps.
- Configurable for none, odd, or even parity and 1 or 2 stop bits.
- Support Function Code 03 / 04 / 06 / 16 of Modbus functions for reading and writing J1939 Messages.

#### **Utility Features**

- Provide Modbus network configuration interface.
- Provide J1939 network configuration interface -Network Address / Device Name....
- Provide J1939 Input / Output configuration interface.







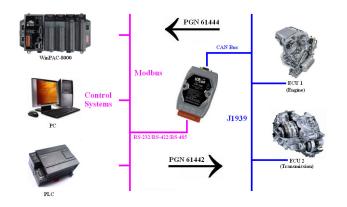


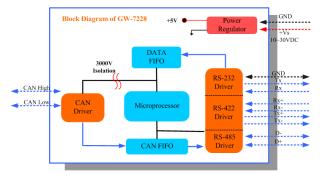
## Hardware Specifications

Hardware	
J1939 Port Channels	1
CAN Interface	
Controller	Microprocessor inside with 96 MHz
Transceiver	NXP 82C250
Connector	9-pin D-sub connector
Baud Rate (bps)	250k
Isolation	$3000~V_{DC}$ power protection on CAN side, 2500Vrms photo-couple isolation on CAN bus
Terminator Resistor	Selectable $120\Omega$ terminator resistor by jumper
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B
Pin Assignment	C.I.A. DS-102 (CAN_H=7, CAN_L=2)
<b>UART Interface</b>	
Connector	14-pin screw terminal connecter
COM1	RS-232(TXD, RXD, GND) / RS-422(Tx+, Tx-, Rx+, Rx-) / RS-485(D+, D-)
Baud Rate (bps)	2400, 4800, 9600, 19200, 38400, 57600, 115200
LED	
Round LED	PWR / J1939 / MODBUS
Power	
Power supply	$+10 \sim +30 \text{ V}_{DC}$
Power Consumption	1.5 W
Dip Switch	Init (Firmware Update) / Normal (Firmware Operation)
Mechanism	
Installation	DIN-Rail
Dimensions	108mm x 72mm x 35mm (H x W x D)
Environment	
Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

## Application

## Block Diagram





## Ordering Information

**GW-7228 CR** 

J1939/Modbus RTU Slave Gateway (RoHS)