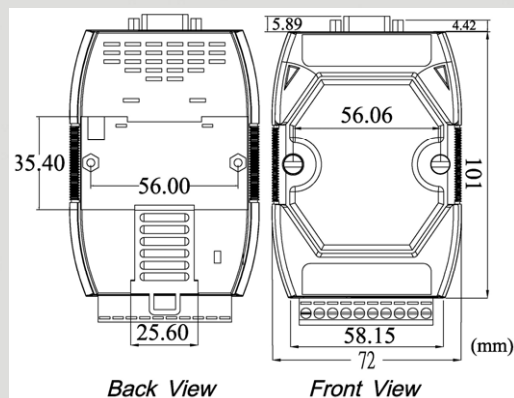# CAN Series Products

Intelligent Modbus RTU to CAN Converter

RoHS CE FC

I-7530A-MR

Dimensions

The I-7530A-MR is designed to unleash the power of CAN bus via RS-232/485/422 communication method. It accurately converts messages between CAN and RS-232/485/422 networks. This module let you communicate with CAN devices easily from any PC or devices with RS-232/485/422 interface. The programmable RS-232/485/422 device (For example: PC, PLC or PAC) or Modbus RTU master device can use the serial port to connect to the CAN network via the I-7530A-MR.

Features

- RoHS Design
- Fully compatible with ISO 11898-2 standard
- Programmable CAN bus baud rate from 10 kbps to 1Mbps or user-defined baud rate
- Support CAN bus acceptance filter configuration
- Support firmware update via RS-232
- Provide utility tool for users module setting and CAN bus communication testing conveniently
- Built-in jumper to select 120Ω terminal resister
- Provide 128 data frames in the CAN buffer and 256 bytes in the UART buffer
- Power, data flow and error indicator for CAN and UART
- Hardware Watchdog design
- Convert CAN message to specific ASCII command string (Normal mode)
- Convert specific ASCII command string to CAN message (Normal mode)
- Provide the transparent communication between the RS-232/485/422 devices via CAN bus (Pair-connection mode)
- Support function code 0x03/0x04/0x10 of Modbus RTU functions for reading and writing CAN message (Modbus RTU mode)

Utility Features

- CAN bus baud rate configuration
- CAN acceptance filter configuration
- RS-232/485/422 baud rate and data format configuration

- RS-232/485/422 communication with checksum function selection

- Communication mode setting
- Easily transmit/receive CAN messages
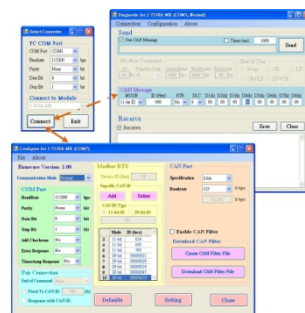
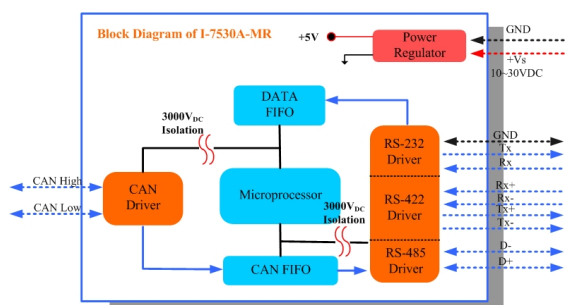## CAN Monitor & Data log Tools

- Show CAN messages in hex or decimal format
- CAN messages with timestamp
- Easy-to-use data logger for the diagnosis of the CAN networks and recording of the received data

- Send the predefined CAN messages manually or cyclically
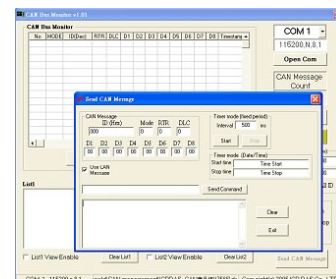
Hardware Specifications

CAN Interface	
Controller	Microprocessor inside with 96 MHz
Transceiver	NXP 82C250
Connector	9-pin male D-Sub (CAN_L, CAN_H, N/A for others)
Channels	1
Baud Rate(bps)	10 k, 20 k, 50 k, 100 k, 125 k, 250 k, 500 k, 800 k and 1 M (allow user-defined baud rate)
Protection	$3000V_{DC}$ power protection and 3750Vrms photo-couple isolation on CAN side
Terminator Resistor	Selectable 120Ω terminator resistor by jumper
Support Protocol	ISO-11898-2, CAN 2.0A and CAN 2.0B
Pin Assignment	C.I.A. DS-102 (CAN_H=7, CAN_L=2)
UART Interface	
Connector	14-pin terminal connector
COM	RS-232: TxD, RxD, GND; RS-422: TxD+, TxD-, RxD+, RxD-; RS-485: DATA+, DATA-
Baud rate(bps)	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400
Protection	$3000V_{DC}$ power protection and 2500Vrms photo-couple isolation on UART side
LED	
Round LED	PWR / CAN / UART
Power	
Power supply	+10 ~ +30 V_{DC}
Power Consumption	1.5W
Dip Switch	Init (Firmware Update, Module Configuration)/Normal (Firmware Operation)
Mechanism	
Installation	DIN-Rail
Dimensions	72mm x 118mm x 35mm (W x L x H)
Environment	
Operating Temp.	-25℃ to 75℃
Storage Temp.	-30℃ to 80℃
Humidity	10~90% non-condensing

Block Diagram

Block Diagram of I-7530A-MR

Application

Pin Assignments

Table 1: RS-232/485/422 Connector (CN1)

Terminal	RS-232/485/422
1	DATA+ (RS-485)
2	DATA- (RS-485)
3	N/A
4	TxD+ (RS-422)
5	TxD- (RS-422)
6	RxD+ (RS-422)
7	RxD- (RS-422)
8	N/A
9	RxD (RS-232)
10	TxD (RS-232)
11	GND (RS-232)
12	N/A
13	+Vs
14	GND

Table 2: CAN DB9 Male Connector (CN2)
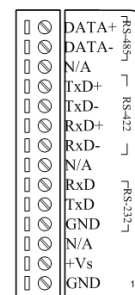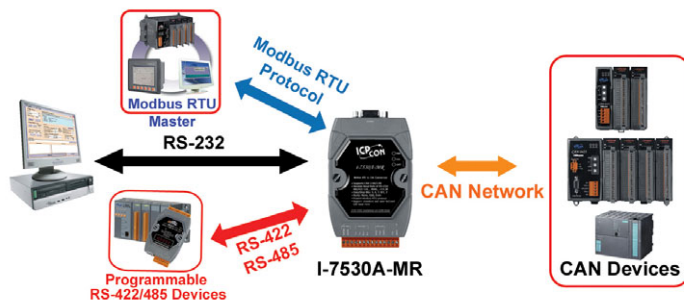
Terminal	2-wire CAN
1	Not Connect
2	CAN Low
3	Not Connect
4	Not Connect
5	Not Connect
6	Not Connect
7	CAN High
8	Not Connect
9	Not Connect

Ordering Information

I-7530A-MR-G CR	Intelligent Modbus RTU to CAN converter (RoHS)