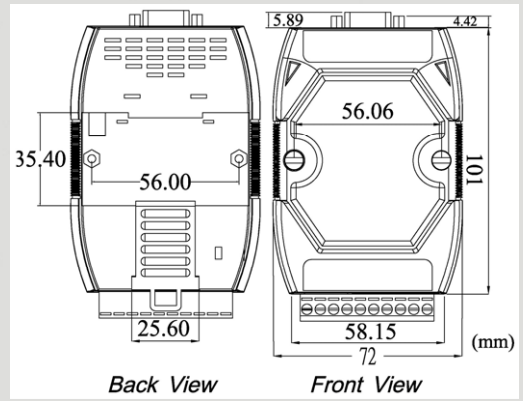




## Intelligent Modbus RTU to CAN Converter



**I-7530A-MR**



**Dimensions**

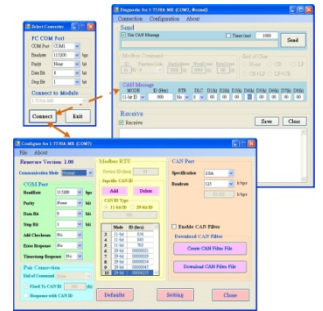
The I-7530A-MR is designed to unleash the power of CAN bus via RS-232/485/422 communication method. It accurately converts messages between CAN and RS-232/485/422 networks. This module let you communicate with CAN devices easily from any PC or devices with RS-232/485/422 interface. The programmable RS-232/485/422 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 resistor
- 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)

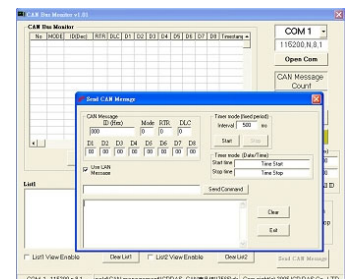
### Utility Features

- 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

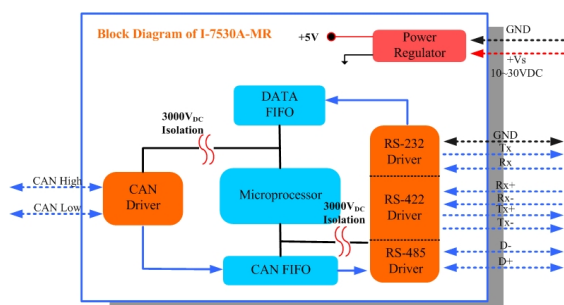


CAN Series

## 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 <sub>DC</sub> power protection and 3750V <sub>rms</sub> 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 <sub>DC</sub> power protection and 2500V <sub>rms</sub> photo-couple isolation on UART side |
| LED                 |   |
| Round LED           | PWR / CAN / UART  |
| Power               |   |
| Power supply        | +10 ~ +30 V <sub>DC</sub>   |
| 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°C to 75°C   |
| Storage Temp.       | -30°C to 80°C   |
| Humidity            | 10~90% non-condensing   |

## Block Diagram



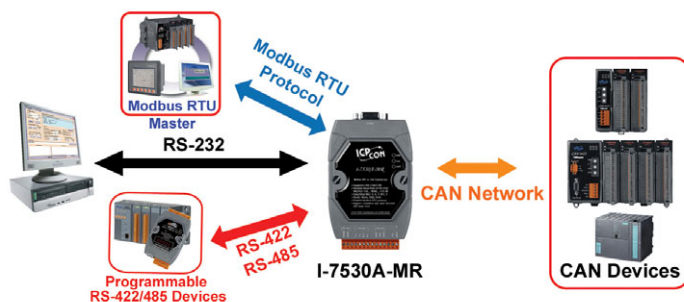
## Pin Assignments

| 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            |

| 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 |

## Application



## Ordering Information

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