



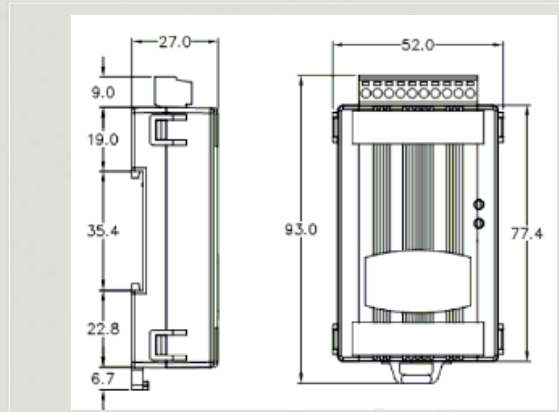
CAN Series Products



Intelligent tiny UART to CAN Converter



tM-7530A

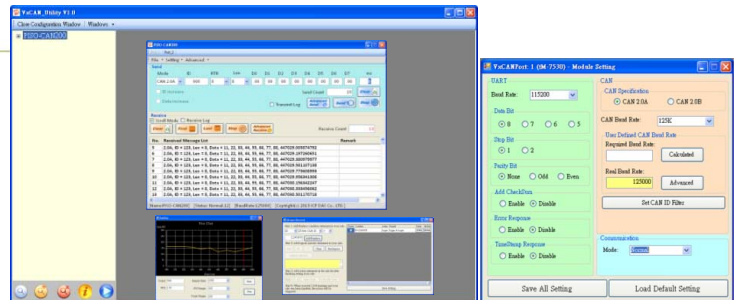


Dimensions

In order to cater for costing and various UART interfaces requirement, we provide a new solution of RS-232/CAN converter-tM-7530A. The tM-7530A is a tiny UART/CAN to fit narrower environment as a result of its small size. It has isolation on power side and on CAN bus side and its performance is better than other UART/CAN module. The function of tM-7530A can full compatibly with I-7530, I-7530T, and tM-7530. In additional, it provides new function such as listen only. User can use this function to listen CAN bus messages and error detection. According to above features, tM-7530A is an economical and practical UART/CAN converter solution.

Features

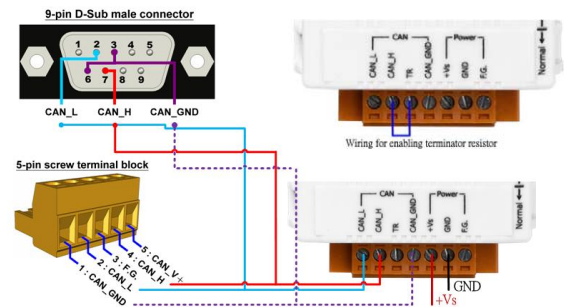
- Watchdog inside
- Fully compatible with ISO 11898-2 standard
- Support various CAN baud rate Max. 1M bps
- Support user-defined CAN baud rate
- Support various UART baud rate Max. 230400 bps
- Build-in selectable 120 Ω terminator resistor
- Power, data flow and error indicator for CAN and UART
- Support various communication mode
- Software buffer on CAN bus side and UART side
- Support user-defined end of characters on pair connection mode
- Support time stamp response on UART side



Software Utility Feature

- CAN Messages logger functions.
- Support group send CAN messages.
- Presents the CAN Bus loading by the trend via utility.
- Supports the configuration of the trigger event for starting transmission, stop reception or recording the messages.
- Integrate all CAN bus converter utility of ICP DAS.

Wiring Connection



Pin Assignment

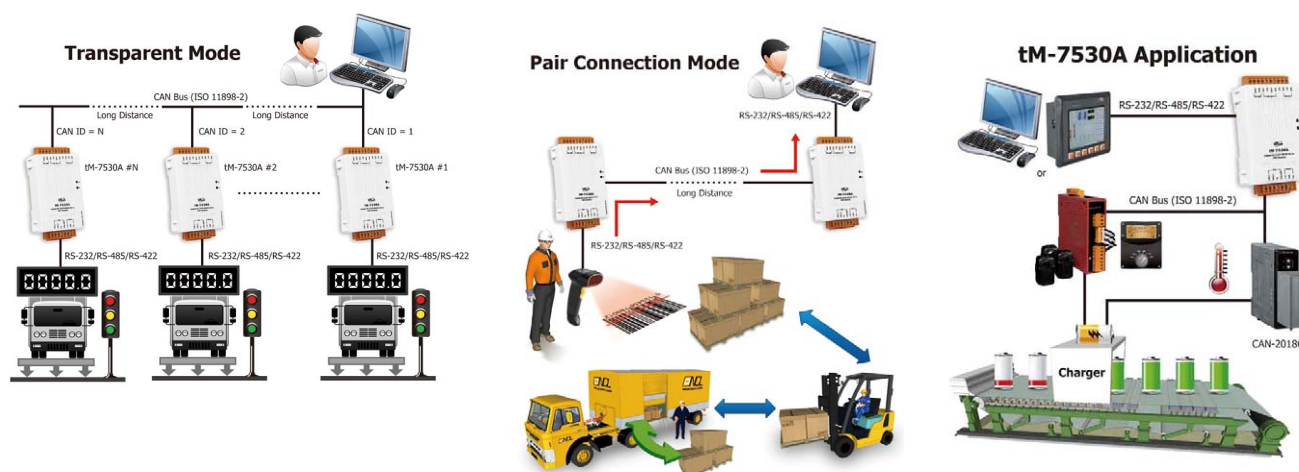
| PIN | UART Description | PIN | Power/CAN Bus Description |
|-----|------------------|-----|---|
| 1 | RS-485 D+ | 1 | CAN Low [CAN_L] |
| 2 | RS-485 D- | 2 | CAN Low [CAN_L] |
| 3 | RS-422 TxD+ | 3 | Terminator Resistor Enabled Switch (TR) |
| 4 | RS-422 TxD- | 4 | CAN Ground [CAN_GND] |
| 5 | RS-422 RxD+ | 5 | +10 to +30 Vdc (+Vs) |
| 6 | RS-422 RxD- | 6 | Power Ground (GND) |
| 7 | N/A | 7 | Frame Ground (F.G.) |
| 8 | RS-232 RxD | | |
| 9 | RS-232 TxD | | |
| 10 | RS-232 GND | | |



Hardware Specifications

| CAN Interface | |
|--------------------------|---|
| Controller | Microprocessor inside with 48MHz |
| Transceiver | NXP TJA1042 |
| Channel number | 1 |
| Connector | 7-pin screwed terminal block(CAN_H, CAN_L, CAN_GND) |
| Baud Rate (bps) | 10 k, 20k 50k, 125k, 250k, 500k, 800k, 1000k bps |
| Transmission Distance(m) | Depend on baud rate (for example, max. 1000 m at 50 kbps) |
| Isolation | 3000VDC for DC-to-DC, 2500Vrms for photo couple |
| Terminator Resistor | Build-in selectable 120 Ω terminator resistor |
| Specification | ISO 11898-2, CAN 2.0A and CAN 2.0B |
| UART Interface | |
| COM | RS-232, RS-485, RS-422 |
| COM Connector | 10-pin screwed terminal block |
| Baud Rate (bps) | 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 230400 bps |
| Data Bit | 5, 6, 7, 8 |
| Stop bit | 1, 2 |
| Parity | None, Even, Odd |
| LED | |
| Round LED | Run LED: Power and Data Flow; ERR LED: Error |
| Power | |
| Protection | Power reverse polarity protection, Over-voltage brown-out protection |
| Input Range | +10 ~ +30 V _{DC} |
| Power Consumption | 1W |
| Mechanism | |
| Dimensions | 52 mm x 93 mm x 27 mm (W x L x H) |
| Environment | |
| Operating Temp. | -25 ~ 75 °C |
| Storage Temp. | -30 ~ 80 °C |
| Humidity | 10 ~ 90% RH, non-condensing |

Applications



Ordering Information

tM-7530A CR

Intelligent tiny UART to CAN converter (RoHS)