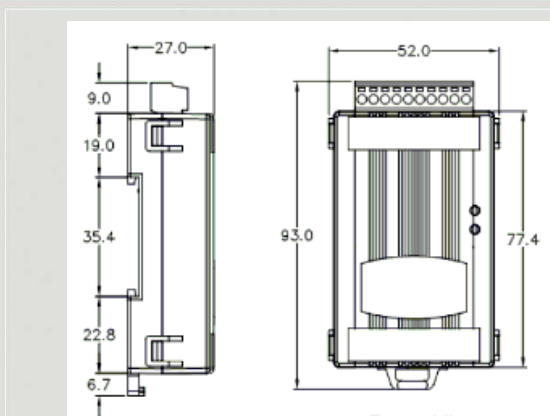# CAN Series Products

Intelligent tiny UART to CAN Converter
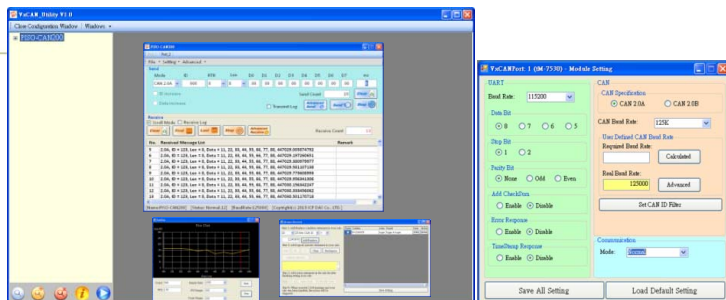
RoHS CE FC

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.
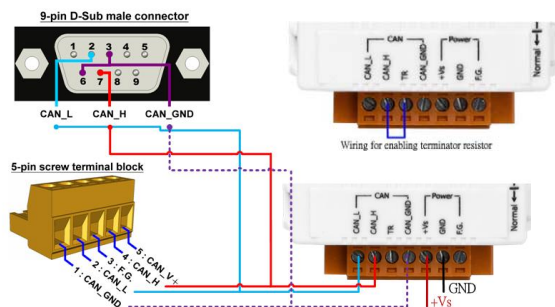
Features

- 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 terminal 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.

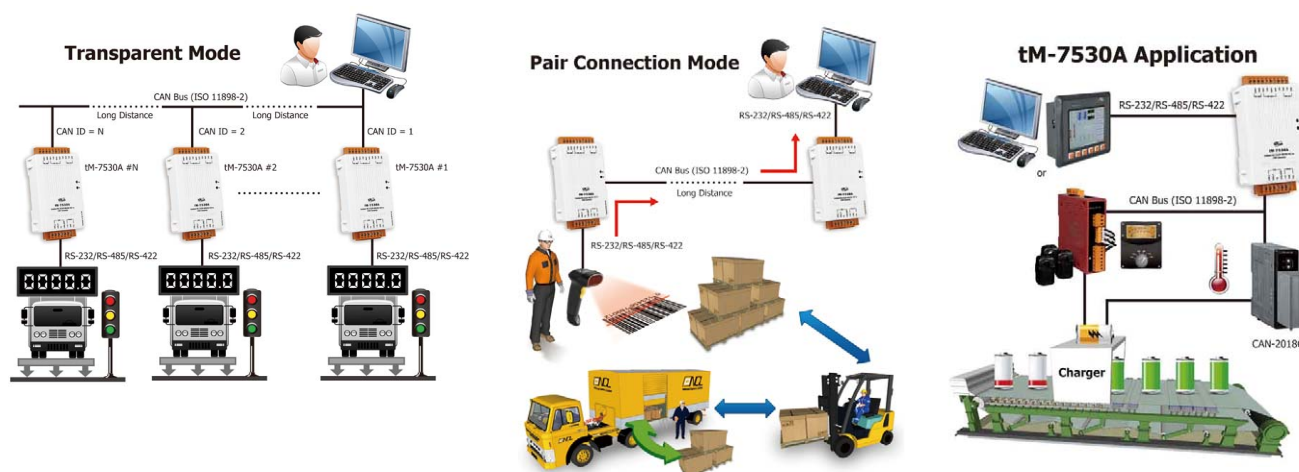## Wiring Connection

Pin Assignment

PIN	UART Description
1	RS-485 D+
2	RS-485 D-
3	RS-422 TxD+
4	RS-422 TxD-
5	RS-422 RxD+
6	RS-422 RxD-
7	N/A
8	RS-232 RxD
9	RS-232 TxD
10	RS-232 GND

PIN	Power, CAN Bus Description
1	CAN Low (CAN_L)
2	CAN Low (CAN_L)
3	Terminator Resistor Enabled Switch (TR)
4	CAN Ground (CAN_GND)
5	+10 to +30 Voc (+Vs)
6	Power Ground (GND)
7	Frame Ground (F.G.)

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, 100k, 125k, 250k, 500k, 800k, 1000k bps
Transmission Distance(m)	Depend on baud rate (for example, max. 1000 m at 50 kbps)
Isolation	3000V_{DC} for DC-to-DC, 2500Vrms for photo couple
Terminal Resistor	Build-in selectable 120 Ω terminal 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 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing

Applications

Transparent Mode

Pair Connection Mode

tM-7530A Application

Ordering Information

tM-7530A CR	Intelligent tiny UART to CAN converter (RoHS)