



tM-7530

Intelligent tiny RS-232 to CAN Converter

#### **■** Features

- Fully compatible with ISO 11898-2 standard
- Support various CAN baud rate Max. 1M bps
- Support user-defined CAN baud rate
- Support various RS-232 baud rate Max. 230400 bps
- **External option 120** Ω terminal resistor
- Power, data flow and error indicator for CAN and RS-232
- Support various communication mode
- Software buffer on CAN bus side and RS-232 side
- Support user-defined end of characters on pair connection mode
- Support time stamp response on RS-232 side









### **■** Introduction

ICP DAS has provided a lot of UART/CAN product solutions which are widely recommended in the market. These UART/CAN converters can help users to implement the communication between RS-232 and CAN network. In order to cater for costing requirement, we provide a new solution of RS-232/CAN converter-tM-7530. The tM-7530 is a tiny RS-232/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 faster than other RS-232/CAN module. The function of tM-7530 can full compatibly with I-7530 and I-7530T. Besides, 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-7530 is an economical and practical RS-232/CAN converter solution.

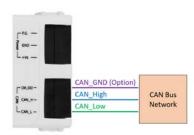
### ■ Software Utility Features

- 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.





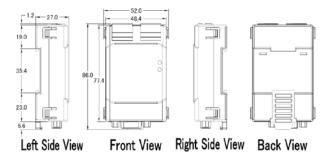
### Wiring Connection



#### Pin Assignments

	III Assigiiii	icites		
Pin	3-wire RS-232		Power	
1	N/A		F.G.	
2	TXD	1 76	GND	7 600 —
3	RXD		+Vs	L.,, _
4	N/A	1		
5	GND	6	CAN	
6	N/A	5 9	CAN_GND	Lowen-
7	N/A	<b>6</b>	CAN_H	€ CAN_H-
8	N/A		CAN_L	-can:-
9	N/A	-		

## **■ Dimensions (Units: mm)**



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# **■** Application





# **■** Hardware Specifications

CAN Interface			
Controller	Microprocessor inside with 48MHz		
Channel number	1		
Connector	3-Pin Push-in type terminal block(CAN_GND, 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	3000VDC for DC-to-DC, 2500Vrms for photo couple		
Terminal Resistor	External option the 120 $\Omega$ terminal resistor		
Specification	ISO 11898-2, CAN 2.0A and CAN 2.0B		
UART Interface			
COM	RS-232		
COM Connector	9-pin female D-Sub (TxD, RxD, GND, N/A for others )		
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 <sub>DC</sub>		
Power Consumption	1W		
Mechanism			
Dimensions	56 mm x 86 mm x 32 mm (W x L x H)		
Environment			
Operating Temp.	-25 ~ 75 ℃		
Storage Temp.	-30 ~ 80 °C		
Humidity	10 ~ 90% RH, non-condensing		

# Ordering Information

tM-7530 CR Intelligent tiny RS-232 to CAN converter (RoHS)	
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