

# **Model:UT-8251A**

**USB/RS232 to CAN BUS Converter**

## **Datasheet**

## 1. Overview

UT-8251A is a high performance USB and RS-232 to CAN-bus communication protocol converter. The converter supports interconnection between USB and CAN-bus or RS-232 and CAN-bus; and supports power supply or USB power supply, which further extends the application range of this converter. UT-8251A converter provides configuration tools, users can flexibly set the interface parameters of UT-8251A converter. Industrial-grade high standard design; isolation between CAN communication interface and system, with certain anti-interference and anti-surge capability, widely used in industrial control and data communication system.

## 2. Main functions and feature

- Support USB/RS232 to CAN BUS Converter

## 3. Technical Parameters

- Supports bi-directional data transfer between CAN-bus and USB/RS-232
- Support USB 2.0 protocol
- 1 CAN-bus communication interface, support 5Kbps-1Mbps custom rate
- 1 USB 2.0 interface (12Mbit)
- 1 RS-232 communication interface, support 300bps-250Kbps custom rate
- Operating voltage: 12-36V DC/USB power supply
- Operating current:  $\leq 150\text{mA}@12\text{V}$
  
- Operating temperature:  $-40 \sim 85^{\circ}\text{C}$
- Storage temperature:  $-40 \sim 85^{\circ}\text{C}$
- Operating humidity: 5~95% (no condensing)
- Storage humidity: 5~95% (no condensing)
- Isolation voltage: 1000VDC
- Electrostatic protection: air 8kV, contact 6kV
- Surge protection: Power port: 1.2/50us common mode 2kV, differential mode 1kV  
CAN port: 600W,  
RS-232 port: 600W

## 4. Indicator light

PWR: Red, power indicator; long light when power supply is normal.

RUN: Green, system operation indicator; flashes when the system is running normally.

TX: Green, communication indicator; when CAN sends data to the outside, the indicator is on, and goes off when the sending is finished.

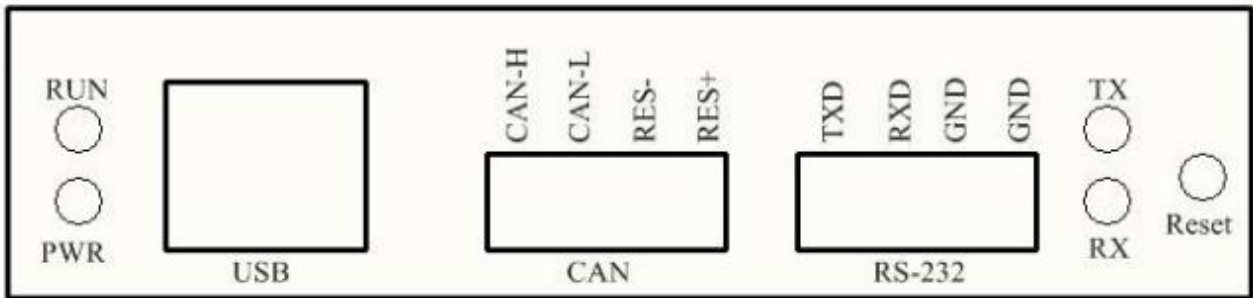
RX: Yellow, communication indicator; when CAN receives data, the indicator is on and goes off when reception is complete.

## 5. Button Definition

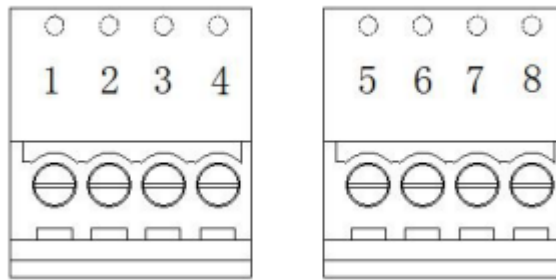
Reset: button, press for 3 seconds to reset the system, press for 5 seconds to restore the device to factory settings

## 6. PIN Definition

### 1. Labeling screen printing diagram



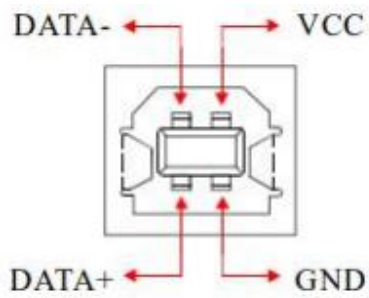
### 2. Terminal pin definition



3.81-4pin Phoenix port

PIN	Pin Name	Description
1	CAN-H	CAN-H Signal connection side
2	CAN-L	CAN-L Signal connection side
3	RES+	CAN Matching resistor side I
4	RES-	CAN Matching resistor end II
5	TXD	RS-232 Data transmission
6	RXD	RS-232 Data Receiving
7	GND	GND
8	GND	GND

### 3. USB signal input and pin definition



USB-B female

USB	Definition	Description
1	VCC	Power supply 5 volts
2	DATA-	DATA-
3	DATA+	DATA+
4	GND	GND

## 5. Product View (Appearance)



## 6. Structure Dimensions

