UT-2505B
RS-232 to CAN-Bus Intelligent Protocol Converter

User Manual

1. Product Overview

The UT-2505B is a high-performance RS-232 to CAN-bus communication protocol converter that supports the interconnection between RS-232 and CAN-Bus. The RS-232 supports 600-230,400 bps baud rate, while CAN-Bus supports 5kbps-1Mbps communication rate. The UT-2505B supports three data conversion modes: transparent conversion, transparent conversion with ID, and Modbus protocol conversion. This expands the application range of the converter. The UT-2505B provides a configuration tool, which allows user to flexibly set the converter interface parameters. It uses industrial-grade high-standard design; the CAN communication interface has certain anti-interference and anti-surge capabilities because it is isolated from the system. The UT-2505B is widely used in industrial control and data communication systems.

2. Technical Parameters

- ✧ Supports two-way data transmission between CAN-Bus and RS-232.
- ✧ Integrates one CAN-bus communication interface, and supports 5Kbps-1Mbps communication rate.
- ✧ Integrates one RS-232/485 communication interface, and supports 600bps-230Kbps communication rate.
- ✧ Provides three data conversion modes: transparent conversion, transparent conversion with ID, Modbus protocol conversion.
- ✧ Operating voltage: 12-36 V DC
- ✧ Operating current: ≤ 150mA@12V
- ✧ Operating temperature: -40°C to +85°C
- ✧ Storage temperature: -40 to +85°C
- ✧ Operating humidity: 5-95% (non-condensing)
- ✧ Storage humidity: 5-95% (non-condensing)
- ✧ Isolation voltage: 1,000 V DC

3. Indicators

PWR: red, power indicator. The indicator is solid on when the power supply is normal.

232TX: green, communication indicator. The indicator flashes when the serial port is sending data. The indicator is off when all data is sent.

232RX: yellow, communication indicator. The indicator flashes when the serial port is receiving data. The indicator is off when all data is received.

CANTX: green, communication indicator. The indicator flashes when the CAN is sending data. The indicator is off when all data is sent.

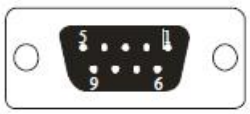
CANRX: yellow, communication indicator. The indicator flashes when the CAN is receiving data. The indicator is off when all data is received.

4. Pin Definitions

(1) CAN interface definitions

Pin No.	Pin Name	Pin Description
1	CANH	CAN-H signal connection terminal
2	CANL	CAN-L signal connection terminal
3	RES-	CAN matching resistance terminal 1
4	RES+	CAN matching resistance terminal 2
5	RESET	Reset (active low)
6	GND	Signal ground
7	GND	Signal ground
8	SET	Setting pin (low effective)
9	VIN	Power input positive
10	GND	Power input negative

(2) RS-232 interface definitions



Pin No.	Pin Name	Pin Description
2	TXD	RS-232 sending pin
3	RXD	RS-232 receiving pin
5	GND	Signal ground
1、4、6、7、8、9	NC	Reserved

5. Product Picture

6. Structure and Dimensions

unit : mm ±1