

UT-2501 RS-232 to CANBUS converter With Industrial photoelectric isolation User manual

I. Description

As a result of photoelectric isolation technology, a fully isolated RS-232 devices at both ends of the electrical circuit and the ground to protect communications equipment from power surges and ground loop interference damage, built-in fast transient voltage suppression protection this protection is designed to protect the CANBUS interface, using today's advanced TVS (TRANSIENT VOLTAGE SUPPRESSOR) significantly improved the reliability and stability of communication systems, and because changes in the original RS-232 interface single-ended transmission, the use of a double balanced transmission, greatly increasing the communication distance. In line with its own dedicated asynchronous RS-232 point to point through the field, you can use the UT-2501 to meet the interface requirements to protect or extend the distance.

UT-2501 volume is small and exquisite, no special requirements of wires, external power supply, power consumption less than 50mA can directly inserted into the equipment RS-232 interface, use very convenient.

UT-2501 Applications:

- ♦ Mine remote communication
- ♦ Intelligent buildings, public broadcasting system
- ♦ Security and fire network
- ♦ Industrial communication network
- ♦ Railway device network

II. Features Description:

- 1. EIA/TIARS-232C TO CANBUS TTL converter
- 2. Interface: RS-232, DB9 female, CANBUS DB9 male with Binding post
- 3. Working mode: Half Duplex
- 4. Medium: STP/UTP
- 5. Baud rate:300bps-115.2Kbps
- 6. Size: 63mmX33mmX17mm
- 7. Environment: $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$, Relative humidity: 5-95%
- 8. Distance:>1.2Km for CANBUS; 5m for Rs232

III. Connectors and signals

RS-232 bay-line distribution

DB9 Female (PIN)	RS-232C Interface signals
1, 4, 6	Shorted
2	Send data SOUT(TXD)
3	Receive Data SIN(RXD)
5	Signal ground GND
7、8	Shorted
9	None

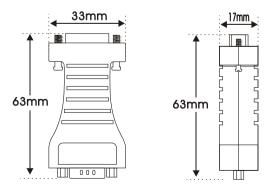
CANBUS Output signal and the terminal pin assignment

DB9 Male (PIN)	Output signal	CANBUS Wiring
1	T/R+	CANBUS (H)
2	T/R-	CANBUS (L)
5	GND	Grounding
6	VCC	+5VPower input 50mA

IV. Installation and application:

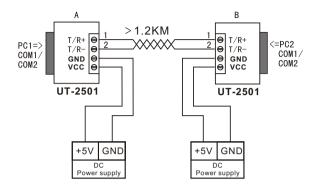
The product shape with DB-9/DB-9 common adapter plug and output interfaces with pins, use twisted pair or shielded cable, connect, removal is very convenient. T/R+, T/R- behalf transceiver H, L, VCC on behalf of power input, Representative of the input ground GND.

V. The product shape dimension



VI. Communication connection chart

1. UT-2501 Communication connection between the interface converter



Note: STP/UTP. Once distance>1.2KM, make sure Pin wire Dia.> 1.0mm.

VII. Malfuntion measure

- 1. Communication failure
 - A. Check the RS-232 side wiring
 - B. Check CANBUS side wiring
 - C. Check the connection status
- 2. Data loss or incorrect
 - A. Check the baud rate setup, make sure they match each other.