

# Model:UT-2201

**UOTEK Mini RS-232 to RS-485 Converter**

## Datasheet



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## 1. Overview

In order to facilitate remote data communication between computers, external devices or smart instruments equipped with different standard serial interfaces, the interconversion of standard serial interfaces is necessary. The converter is compatible with RS-232 and RS-485 standards and is capable of converting single-ended RS-232 signals to balanced differential RS-485 signals, the converter can extend the RS-232 communication distance up to 1.2 km without external power supply. The unique I/O circuitry automatically controls the direction of data flow without any handshaking signals (such as RTS, DTR, etc.), thus ensuring that programs written in RS-232 half-duplex mode can run in RS-485 mode without changes, ensuring that they are suitable for existing operating software and interface hardware. The converter transmission rate is 300-115.2Kbps. It can be used to form a point-to-point or point-to-multipoint remote multi-computer communication network between the main controller, or between the main controller and the microcontroller or peripherals to realize multi-computer answering communication. It is widely used in industrial automation control system, one-card, access control system, parking system, self-service banking system, bus fare collection system, canteen vending system, company staff attendance management system, highway toll station system, etc..

## 2. Major Functions & Features

- Mini RS-232 to RS-485 Converter

## 3. Technical Parameters

- Interface feature: RS-232C,RS-485standard interface compatible with EIA,TIA
- Electric interface: RS-232end
- DB9holeconnector, RS-485 end
- DB9 needle connector,with connection pole
- Operating mode: asynchronism half-duplex difference transmission
- Transmission media: twisted -pair or STP
- Transmission rate: 300-115.2KBPS
- External discharge dimension: 63mm X33mmX17mm
- Operating temperature:- 25 ~ 70 °C
- Relative humidity: 5 ~ 95%
- Transmission distance: 1,200m(RS-485 end),5m(RS-232 end))

## 4. Pin assignment

### Connector & signal

#### RS-232C pin assignment

DB9 female	RS-232C signal
1	DCD
2	SOULT (TXD)
3	SIN (RXD)
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

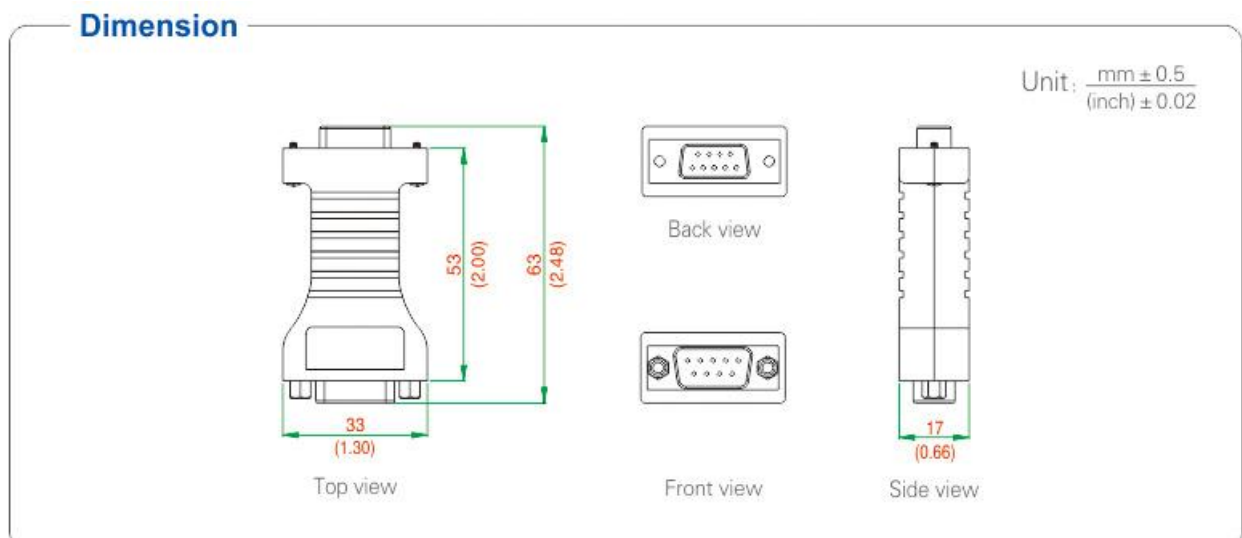
#### RS-485 output signal and terminal block pin assignment

DB9 male	Output signal	RS-485 half-duplex connection
1	T/R+	RS-485 (A+)
2	T/R-	RS-485 (B-)
3	N/C	-
4	N/C	-
5	GND	GND
6	VCC	+5V backup power input

## 5. Product View (Appearance)



## 6. Structure Dimensions



## 7. Ordering Information

Ordering											
Model	Signal/Port			Protection		Baudrate	Environment			Power	
	RS-232	RS-485	RS-422	RS-232	RS-485/422		Temperature		Humidity	Port-Powered	External Power
	DB9 female	DB9 male					-25/70°C	-40/85°C	5-95%		
UT-2201	✓	✓		-	± 15KV ESD	300bps-115.2kbps	✓		✓	✓	

Accessories: Terminal block.