Mini RS-232 to RS-485 Converter

WI-IOT3101

Overview

In order to facilitate remote data communication between computers, external devices or smart instruments, the interconversion of standard serial interfaces is necessary to design different standard serial interfaces. 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.

Main Functions & Features

- Mini RS-232 to RS-485 Converter

Technical Parameters

- Interface feature: RS-232C, RS-485 standard interface compatible with EIA, TIA
- Electric interface: RS-232 end
- DB9 hole connector, 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: 1200m (RS-485 end), 5m (RS-232 end)

Pin assignment

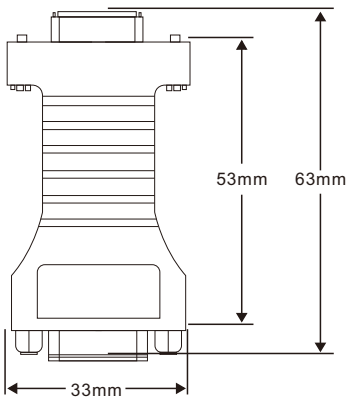
RS-232C pin assignment

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

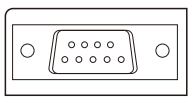
RS-485 output signal and terminablock pin assignment

DB9 male	Output signal	RS4-85 half-duplex connection
1	T/R+	RS-485(A+)
2	T/R-	RS-485(A-)
3	N/C	—
4	N/C	—
5	GND	GND
6	VCC	+5Vbackup power input

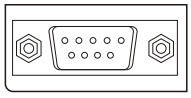
Structure Dimensions



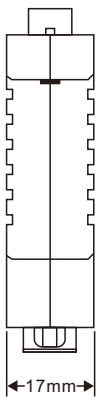
Top view



Back view



Front view



Side view

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