TLC422

RS-232 to RS-422 Converter（DB9）

Introduction:

TLC422 is the interface converter between RS232 and RS422. It is powered from serial port (such as COM port of computer), no outside power needed. Small size, long transmission distance, high rate, stable performance. The TLC422 has a DB9 female connector on the RS232 side and either a DB9 male connector or 5 bit terminal block on the RS422 side. It is used widely in the field of electricity, industrial automatic control, IC card billing system. It is a high quality low price data serial conversion product.

Packing List:

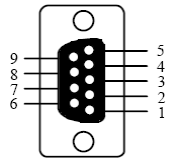
TLC422 is shipped with following items.

1. TLC422 × 1
2. Separate terminal block(DB9F to 5 bit) × 1

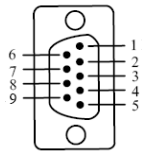
Features:

1. Port-powered from RS232 port (TXD, RTS, DTR): no external power is necessary
2. Convert RS-232(TXD,RXD signal) to RS-422 signal
3. Plug-and-Play (hot-pluggable, Data format Auto-sensing & Self-adjusting)
4. Data direction auto-turnaround, no flow control is required
5. Point to multi point, support 128 nodes loopback

Pinout Configuration:



DB9F (Female/hole)



DB9M (Male/needle)

RS422 port adopt DB9M (DB9F to 5 bit terminal block), RS232 port adopt DB9F (Female), no power supply Input.

RS-232 (DB9F)

2 TXD **3** RXD **5** GND

1,4,6 Interconnection **7,8** Interconnection

RS-422 (DB9M)

1 T+ **2** T- **3** R-

4 R+ **5** GND

Terminal block (DB9F to 5 bit)

T+ To external RS-422 signal R+

T- To external RS-422 signal R-

R- To external RS-422 signal T-

R+ To external RS-422 signal T+

GND Signal GND

Specifications:

Standards: EIA RS-232C, RS-422 standard

Working mode: Asynchronism, point to point, 4 wire full-duplex

Transfer rate: 300~115200bps, auto test serial signal rate detect signal speed automatically, zero delay time

Flow control: Data direction auto-turnaround, no flow control is required

Max number of drops: 128 nodes

Transfer distance: RS-422 side: 1.2Km

RS-232 side: no less than 5m

Port protect: 1500W surge protection,15KV ESD protection

Connector: RS-232 side DB9 female

RS-422 side DB9M(DB9F to 5 bit terminal block)

Power

Power input: No power supply need, powered from RS-232 port TXD, RTS, DTR

Consumption: Static less than 10mA, dynamic less than 40mA

Environment

Operating temperature: -10°C to 60°C

Storage temperature: -40°C to 85°C

Humidity: 5% to 95%(no condensation)

Appearance

Dimensions: 90.0mm×33.0mm×16.5mm(DB9)

Material: Plastic(shell)

Weight: 40g

Warranty: 3 years

Troubleshooting instructions:

Perform a loop back test on two TLC422 converters. Tie signals T+ to R+ and T- to R- of the TLC422.Attach the converter to the serial ports on a PC and using a HyperTerminal program send a character from one and see if it echoes to the other. This will test both transmit and receive functions.

Applications:

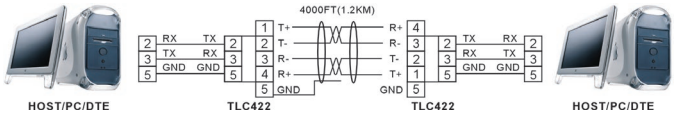


Figure 1: Extending the RS232 data distance

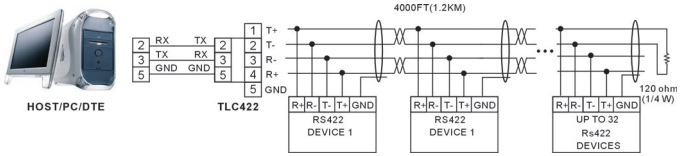


Figure 2: Master/Slave multi-drop configuration

Certifications:

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