
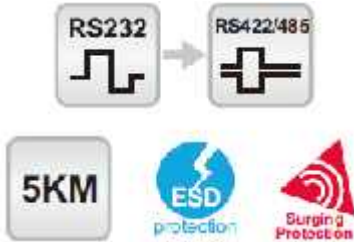


|   | Product Name  | Key Feature   |
|---|---|---|
|  | <p style="text-align: center;"><b>UT-501</b></p> <p style="text-align: center;">Port-powered, RS-232 to RS-485/422, Rail-mounted, PhotoElectric isolation</p> |  |

**INTRODUCED**

**I. Summary:**

Compatible with the Recommended Standards of RS-232C, RS-422 and RS-485, UT-501 photoelectric isolation interface converter can convert the single-ended RS-232 signal into balance differenced RS-422 or RS-485 signal. The built-in photoelectric isolator can provide an isolation voltage of as high as 2500Vrms. Also, there is a rapid transient voltage suppression protector for protection of RS-422/RS-485 interface with advanced TVS (TRANSIENTVOLTAGE SUPPRESSOR) technology adopted. Under normal conditions, the TVS tube is in the state of high resistance. However, when both ends of the TVS tube are hit by a transient high energy, the impedance at both ends can be depressed by the TVS at a very high speed, and after absorbing a high current, the voltage between the two ends is suppressed and kept at a pre-set value, therefore no damage is caused to the electrical components behind by the transient high voltage impact. The protector can effectively restrain lightning or ESD (electro static discharge) with a protection voltage of 600W on each line for lightning surge and surge voltage or transient over voltage possibly caused up by various reasons, and at the same time, a high-speed transmission of RS-422/RS-485 interface is ensured by the tiny capacitance between the poles. Through a DB9 female connector RS-232 interface is connected to other interfaces compatible with RS-232C standard, and for RS-422 and RS-485 interfaces and 10PIN connector is to be used for connection. The unique I/O circuit of the internal zero delay auto transceiver contained in the converter controls the data stream direction automatically without any handshaking signal (for example RTS, DTR etc). The converter is plug-and-play without any jumper settings needed for mode shift between full duplex (RS-422) and half duplex (RS-485). The converter is applicable for all the existing communication software and interface hardware without any software modifications for the previous working mechanism based on RS-232.

A reliable and stable point-to-point and point-to-multipoint communication can be ensured by UT-501 photoelectric isolation interface converter. For point-to-multipoint communication, as many as 32 interface facilities of RS-422 or RS-485 standard can be connected to each converter, and a high data transmission rate of 300-115.2KBPS can be achieved. Power indicator light and data traffic indicator light are also available with the converter for malfunction indication. Two conversion communication modes including RS-232 to RS-422 and RS-232 to RS-485 are supported.

**II. Specification:**

- Interface characteristic: compatible with the standards of RS-232C and RS485/RS-422 issued by EIA/TIA.
- Electric interface: DB9 female connector for RS-232 interface input end, and 10PIN connector for RS-422/RS-485 interface output end.
- Protection grade: +/-15KV ESD protection for RS-232 interface, and 600W surge protection each line for RS-422 and RS-485 interfaces.
- Isolation degree: isolation voltage 2500Vrms 500DC non-stop.
- Operation mode: asynchronous half duplex or asynchronous full duplex.
- Signal indication: 3 pilot lamps for Power (PWR), Send (TXD) and Receive (RXD).
- Transmission media: twisted pair cable or shielded cable.

- Transmission rate: 115.2K BPS to 300M, 38.4KBPS to 2.4KM and 9,600 BPS to 5KM.
- Dimensions: 120mm\*72mm\*22mm.
- Working circumstance: -40 to 85 , relative humidity 5%-95%.
- Transmission distance: 0-5,000meters (115,200bps-9,600bps).

## INFORMATION ORDER

**MODEL: UT-501** Port-powered, RS-232 to RS-485/422, Rail-mounted,PhotoElectric isolation