



	Product Name	Key Feature
	<p style="text-align: center;"><b>UT-216</b></p> <p style="text-align: center;"><b>External-powered, RS-232 to RS-485/422, Wall-mounted, 600w Surging protection</b></p>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>RS232</p> </div> <div style="text-align: center;">  <p>RS422/485</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  <p>1.2KM</p> </div> <div style="text-align: center;">  <p>Lightning strike protection</p> </div> <div style="text-align: center;">  <p>Surging Protection</p> </div> </div>

## INTRODUCED

### I. Summary:

Compatible with the Recommended Standards of RS-232C, RS-422 and RS-485, UT-216 interface converter can convert the single-ended RS-232 signal into balance differenced RS-422 or RS-485 signal. Also, there is a rapid transient voltage suppression protector for protection of RS-422/RS-485 interface with advanced TVS(TRANSIENT VOLTAGE 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 a DB9 male and RJ-45 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-216 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, DB9 male and RJ-45 connector for RS-422/RS-485 interface output end.
- Protection grade: +/-15KVESD protection for RS-232 interface, and 600Wsurge protection each line for RS-422 and RS-485 interfaces.
- 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: 115.2KBPS to 300M, 38.4K BPS to 2.4KM and 9,600 BPS to 5KM.
- Dimensions: 113mm\*55mm\*25mm.

- Working circumstance: -40 to 85 , relative humidity 5%-95%.
- Transmission distance: 0-1,200meters (115,200bps-9,600bps).

## INFORMATION ORDER

**MODEL: UT-216** External-powered, RS-232 to RS-485/422, Wall-mounted, 600w Surging protection