


	Product Name	Key Feature
	<p style="text-align: center;"><b>UT-1204</b></p> <p style="text-align: center;"><b>4-port RS485 Terminal Server HUB</b></p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 RS232 RS485             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 RS485 4             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 OPTO Isolated             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 5KM             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 Lightning strike protection             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 ESD protection             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 Surging Protection             </div> <div style="border: 1px solid gray; padding: 5px; margin: 5px;">                 Guarantee year x5             </div> </div>

## INTRODUCED

### I. Summary

As a new RS-485 bus splitting hub specially designed to meet requirements of RS-485 systems under complex electromagnetic environments, UT-1204 supports a transmission rate as high as 115.2KBPS. To ensure safe data transmission, photoelectric isolation technology is adopted for RS-485 interfaces to eliminate the induction of lighting surge into converter or related devices. An isolation voltage as high as 2,500V can be provided by the built-in photoelectric isolator and the 600W surge protection circuit for effective restraint of lighting and ESD as well as lighting strike and common-grounding interference. The external switching power ensures the best safety and stability for outdoors projects.

The direction interpreting circuit under RS-485 working mode is able to perform automatic interpretation of data stream direction for circuit control through automatic shift, therefore the transfer delay for RS-485 is solved. RS-485 interface has a transmission distance of more than 1,200 meters with stable performance. It is widely used in speedway charging system, road monitoring system and electric data gathering system as a quality product for data interface conversion at competitive price.

All ports of RS-485 star bus connection provided by UT-1204 RS-485 hub have short circuit and open circuit protection. The photoelectric isolation voltage is as high as 2,500V. The RS-485 bus structure can be easily reshaped and network range split for improvement of communication reliability. In the event of lighting strike or device failure, the affected network range will be isolated to ensure the normal working of other network ranges. This feature enhances the reliability of the current RS-485 network greatly with effective decrease of time consumption for network maintenance. A proper use of UT-1204 RS-485 hub will surely help you present a nice RS-485 system design of uniquely reliable stability.

### II. Performance parameters

- Interface: compatible with RS-232C and RS-485 standards by EIA/TIA.
- Electric interface: RS-232C interface for RJ-45 socket and RS-485 interface for RJ-45 socket.
- Transmission media: twisted-pair cable or shielded cable.
- Working mode: asynchronous duplex
- Signal indication: 7 signal indicator power(PWR), sending(TD), receiving(RD) and failure(E1-E4).
- Isolation degree: isolation voltage 2,500 Vrms, 500VDC continuous. DV/DC modules.
- Transmission rate: 115.2K-300BPS.
- Protection grade: 5KVESD protection for RS-232 interface and 600W lighting surge protection for each RS-485 interface.
- Transmission distance: 0-5KM (115.200-300BPS)
- Measurements: 90mm\*69mm\*23mm
- Working environments: -25 to +70 degrees Celsius, relative humidity 5% to 95%.

## INFORMATION ORDER

**MODEL: UT-1204**      1-port RS485 to 4-port 485 Terminal Server HUB