

Model: UT-798

(Product Name: PCI-E to 8-port RS-485/422 high-speed serial card)

Datasheet

UTEK TECHNOLOGY



1. Overview

UT-798 industrial-grade PCI-E converter card, compatible with RS-422 and RS-485 standards, can convert single-ended PCI-E signals to balanced differential RS-422/RS-485 signals with fast transient voltage suppressor protector, which is designed to protect RS-422/RS-485 interface with today's advanced TVS (TRANSIENT VOLTAGE SUPPRESSOR) transient voltage suppressor, the TVS tube is in a high resistance state under normal conditions, when the two ends of the TVS tube are subjected to an instantaneous high energy shock, it can reduce the impedance of its two ends at a very high rate and absorb a large current, thus clamping the voltage at its two ends to a predetermined value and protecting the circuit components behind it from being damaged by transient High-voltage shock and damage. This protector can effectively suppress lightning (LIGHTNING) and ESD, providing 600W of lightning surge protection power per line, as well as surge voltages and transient overvoltages generated by various causes on the line, and the extremely small inter-pole capacitance ensures high-speed transmission of the RS-422/RS-485 interface.

2. Major Functions & Features

• Support PCI-E to 8-port RS-485/422 high-speed serial card

3. Technical Parameters

- Hardware Interface
 Connection Type: 1 DR62 Female
 BUS: X1 2.5Gbps PCI Express
- Signal
 RS-422: T/R+, T/R-, RXD+, RXD-, GND
 RS-485: Data+(A) Data-(B) GND
- Transmission rate: 300bps-921.6kbps
- Data bits: 5, 6, 7, 8
- Stop bits: 1, 1.5, 2
- Parity bits: None, Even, odd, Space, Mark
- Stream control: RTS/CTS, XON/XOFF
- Operating temperature: -40~85°C
- Interface protection: RS-422, RS-485 interface surge protection of 600W per line, ±15K V electrostatic protection
- Transmission distance: RS-485/422 communication distance up to 1.2Km
- Support system: Win2000/XP/Vista/Win7/8/8.1/NT4.0/CE4.2/5.0/6.0/xwokrks/Linux2.4X/2.6

4. Hardware Definition and Initial Setup

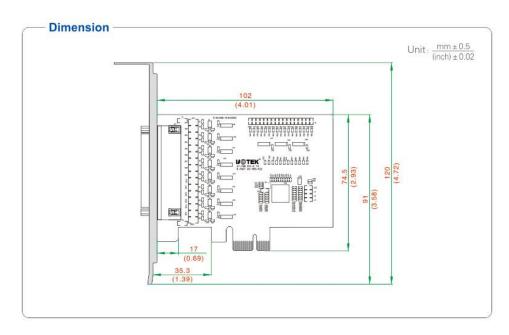
DB9 Male(PIN)	Output signal	RS-422 Full-duplex	RS-485 Half-duplex								
1	T/R+	Transmitting(A+)	RS-485(A+)								
2	T/R-	Transmitting(B-)	RS-485(B-)								
3	RXD+	Receiving(A+)	-								
4	RXD-	Receiving(B-)	-								
5	GND	GND	GND								
6	N/C	-	-								
7	N/C	-	-								
8	N/C	-	-								
9	N/C	-	-								

DB9 pin type: RS-485/RS-422 output signal pin assignment (Port1-Port8)

5. Product View (Appearance)



6. Structure dimensions





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7. Ordering

ORDERING

Model	Signal/ Interface			·	Protection level	Baud rate	Operating Environment				
	PCI-E	RS-485/ 422	Port number				Temperature		Humidity	Power	
			PCI-E	RS-485/ 422	RS-485/422		-25~70°C	-40~85°C	5~95%	plug and play	External power
UT-798	Universal	v	1	8	\pm 15KV ESD	300bps-921.6 kbps		V	V	V	