

## Model: UT-728

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

# Datasheet



### UTEK TECHNOLOGY (SHENZHEN) CO., LTD.

Add: Room 1001, Building 7, Skyworth Innovation Valley, No. 8, Tangtou No.1 Road,  
Shiyan Old Street, Bao 'an District, Shenzhen

Tel: +86-755-81202008

Fax: +86-755-27886083

Http: [www.uotek.com](http://www.uotek.com)

## 1. Overview

The UT-728 PCI converter card, compatible with RS-422 and RS-485 standards, is capable of converting single-ended PCI signals to balanced differential RS-422/RS-485 signals with a fast transient voltage suppressor protector, which is designed to protect RS-422/RS-485 interfaces with today's advanced TVS (TRANSIENT Under normal conditions, the TVS tube is in a high resistance state. When the two ends of the TVS tube are subjected to an instantaneous high-energy shock, it can reduce the impedance at both ends at a very high rate and absorb a large current, thus clamping the voltage at both ends at a predetermined value and protecting the circuit components behind from damage due to transient high-voltage shock. 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 over-voltages 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

- Supports 8-port RS-485/422 PCI multi-serial card converter

## 3. Technical Parameters

- Hardware Interface
  - Connection Type: 1 DR62 Female
  - BUS: 32 bit Universal PCI
- 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,  $\pm 15\text{K V}$  electrostatic protection
- Transmission distance: RS-485/422 communication distance up to 1.2Km
- Support system: Win2000/ 2003/ XP/ Vista/ 2003\_ Server/ NT4.0/ CE 4.2/ 5.0/ 6.0/ Vxworks/ Linux 2.4.x/ 2.6.x

## 4. Hardware Definition and Initial Setup

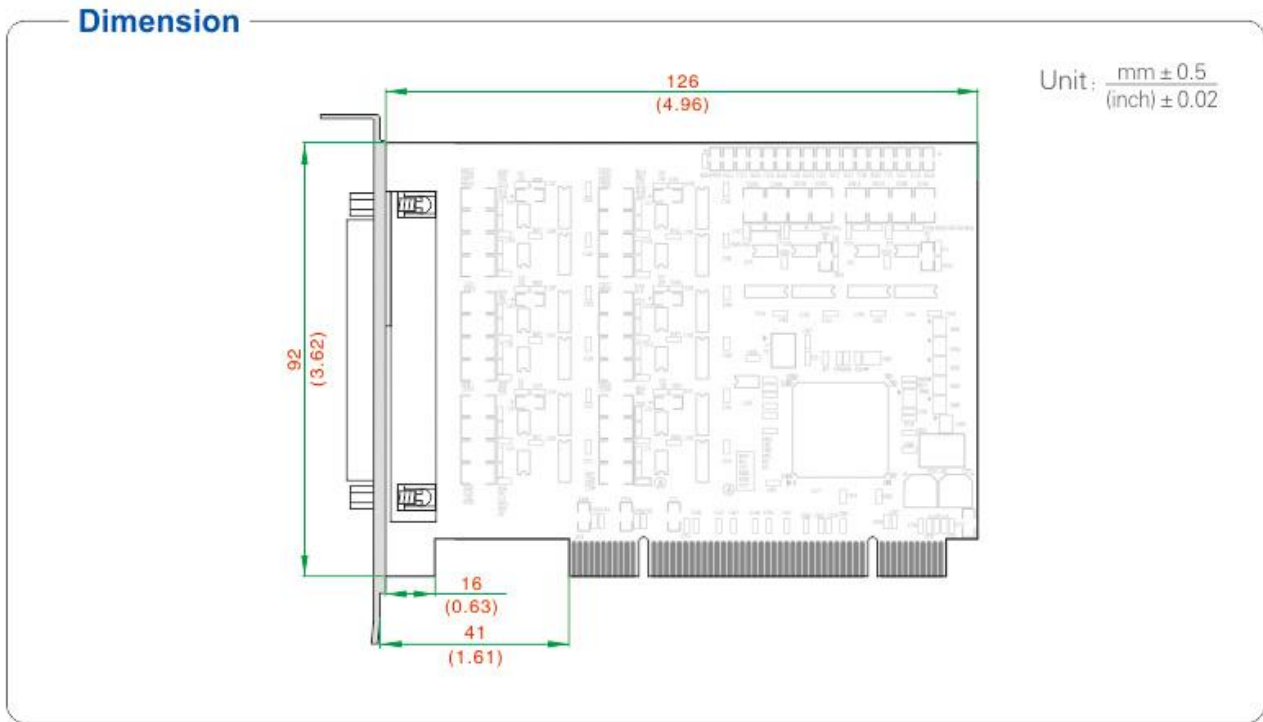
DB9 pin type: RS-485/RS-422 output signal pin assignment (Port1-Port8)

| 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+          | Receive(A+)        | -                  |
| 4             | RXD-          | Receive(B-)        | -                  |
| 5             | GND           | GND                | GND                |
| 6             | N/C           | -                  | -                  |
| 7             | N/C           | -                  | -                  |
| 8             | N/C           | -                  | -                  |
| 9             | N/C           | -                  | -                  |

## 5. Product View (Appearance)



## 6. Structure dimensions



## 7. Ordering

### Ordering

| Model  | Signal/ Interface |            | Port number |            | Protection level         | Baud rate            | Operating Environment |          |          | Power         |                |
|--------|-------------------|------------|-------------|------------|--------------------------|----------------------|-----------------------|----------|----------|---------------|----------------|
|        | PCI               | RS-485/422 | PCI         | RS-485/422 | RS-485/422               |                      | Temperature           |          | Humidity | plug and play | External power |
|        |                   |            |             |            |                          |                      | -25~70°C              | -40~85°C | 5~95%    |               |                |
| UT-728 | Universal         | DR 62      | 1           | 8          | ± 15KV ESD<br>600W Surge | 300bps-921.6<br>kbps |                       | √        | √        | √             |                |