OX-MSC622

PCI-E to 2-PORT RS-485/422

Interface Converter

I. Overview

OX-MSC622 is a PCI-E to two-port RS-485/422 serial card, capable of converting single-ended PCI-E signals to RS-485/422 signals with a fast transient voltage suppression(TVS) protector, which is designed to protect the RS-485/422 interface with today's advanced TVS tube, which is in a high group state under normal conditions. When the TVS tube is subjected to an instantaneous high-energy shock, it can reduce the impedance at both ends at a very high speed and absorb a large current, thus clamping the voltage at both ends to a predetermined value and protecting the circuit components behind from damage due to transient high-voltage shock. This protector effectively suppresses LIGHTNING and ESD, provides 600W of lightning surge protection on the signal line, as well as surges and transient overvoltages from various causes on the line, and the extremely small inter-pole capacitance ensures high speed transmission of RS-485/422.

II. Specifications

Hardware Interface

Connection type: Bus: PCI-E

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, 2

Parity bits: support odd, even, no parity, blank
0, flag 1

Flow control: RTS/CTS XON/XOFF

• Operating temperature: $0^{\circ}\text{C} \sim +70^{\circ}\text{C}$

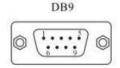
• Interface protection: RS-485/422 interface signal line 600W surge protection

 Support system: WIN 98/2000/2003/XP/VISTA /2008/7/2012/8/81/2016/10/11/2019/NT4.0 / Linux

III. Connector & signal

DB9 pin type: RS-485/422 output signal pin assignment (Port1-Port2)

| DB9 PIN | Output signal | RS422 | RS485 |
|---------|------------------|-------------|-------------|
| | | full-duplex | half-duplex |
| | | connection | connection |
| 1 | T/R+ | TX(A+) | RS-485(A+) |
| 2 | T/R- | TX(B-) | RS-486(B-) |
| 3 | RXD+ | RX(A+) | - |
| 4 | RXD- | RX(B-) | - |
| 5 | GND | GND | GND |
| 6/7/8/9 | / | / | / |



IV. Product shape drawing

