



## VXC-142AU/VXC-142iAU VEX-142/VEX-142i

Serial Communication Card with 2 RS-422/485 ports

### Features

- Built-in COM-Selector
- Short Card Design
- Provides 2 RS-422/485 ports
- 2500 V<sub>rms</sub> isolation for i version
- +/-4 kV ESD Protection for i version
- 128-byte Hardware FIFO for Each Port
- Supports 3.3 V/5 V PCI bus for U versions
- Supports PCI Express bus for VEX series
- RoHS compliant with no Halogen
- Automatic RS-485 Direction Control



### Introduction

The VXC-142/VEX-142 series card provides two RS-422/RS-485 serial ports and supports 3.3 V/5 V PCI bus. The VXC-142iAU/VEX-142i card also supports isolation voltage up to 2.5 kV. Each port can be configured as either RS-485 for half-duplex or RS-422 for full-duplex communication. It equips a 128-byte hardware FIFO for each port, offers speed up to 115200 bps and supports full-duplex communication.

Users can select a specified COM port number manually by setting dip switch, or let the driver choose an available number automatically. The driver provides a maximum of 128 KB software FIFO for each COM port under Windows. It's practical for large file transmission.

In harsh industrial environments, the onboard ESD protection component diverts the potentially damaging charge away from sensitive circuit and protects the computer and equipment from being damaged by high potential voltage.

The serial communication card are designed for use with intelligent devices like bar code reader, serial printers, intelligent sensors, instrumentation equipment, computers and almost any device with an RS-422/485 port.

### Applications

- Industrial Machinery
- Building Automation
- Restaurant Appliances
- Laboratory Equipment & Research
- Industrial Communication

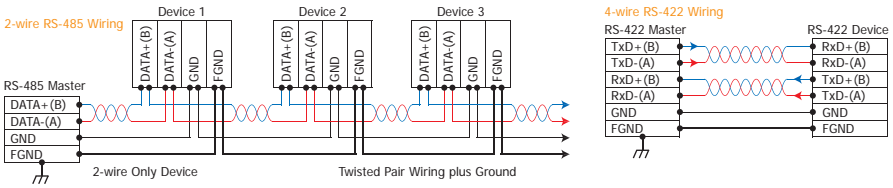
### Software

- Drivers for 32-bit and 64-bit Windows XP/2003/2008/7/8/10
- Driver for Linux

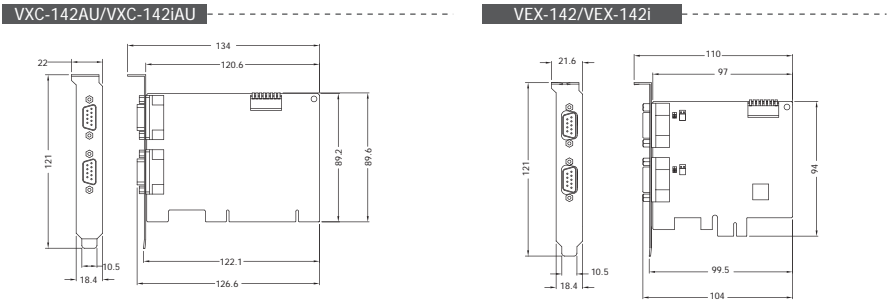
### Hardware Specifications

Models	VXC-142AU	VXC-142iAU	VEX-142	VEX-142i
<b>Communication Port</b>				
COM1, COM2	RS-422/485	The RS-422 and RS-485 cannot be used simultaneously		
	RS-422	TxD+, TxD-, RxD+, RxD-, RTS+, RTS-, CTS+, CTS-, GND		
	RS-485	Data+, Data-, GND (Automatic RS-485 Direction Control)		
UART	16C950 compatible			
Baud Rate	50 ~ 115200 bps			
Data Bit	5, 6, 7, 8			
Stop Bit	1, 1.5, 2			
Parity	None, Even, Odd, Mark, Space			
FIFO	Internal 128 bytes			
Isolated	-	2500 V <sub>rms</sub>	-	2500 V <sub>rms</sub>
<b>General</b>				
Bus Type	Universal PCI, 3.3 V and 5 V, 33 MHz, 32-bit, Plug and Play		PCI Express x1, Plug and Play	
COM-Selector	Yes (8-bit DIP switch)			
Connector	2 x Male DB-9			
Power Consumption	100 mA @ 5 V	480 mA @ 5 V	120 mA @ 5 V	440 mA @ 5 V
Operating Temperature	0 °C ~ +50 °C			
Storage Temperature	-20 °C ~ +70 °C			
Humidity	0 ~ 90% RH, non-condensing			
Dimensions (L x W x D)	134 mm x 90 mm x 22 mm		110 mm x 94 mm x 22 mm	

**Wiring**



**Dimensions (Unit: mm)**



**Pin Assignments**

Pin Assignment	Terminal	No.	Pin Assignment
GND/VEE	05	09	CTS- (A)
RxD- (A)	04	08	CTS+ (B)
RxD+ (B)	03	07	RTS+ (B)
TxD+ (B)/Data+ (B)	02	06	RTS- (A)
TxD- (A)/Data- (A)	01		

RS-422/485 Male DB-9 Connector

**Ordering Information**

VXC-142AU CR	Universal PCI , Serial Communication Card with 2 RS-422/485 ports (RoHS)
VXC-142IAU CR	Universal PCI , Serial Communication Card with 2 Isolated RS-422/485 ports (RoHS)
VEX-142 CR	PCI Express, Serial Communication Card with 2 RS-422/485 ports (RoHS)
VEX-142i CR	PCI Express, Serial Communication Card with 2 Isolated RS-422/485 ports (RoHS)

**Accessories**

CA-0910F	9-Pin Female-Female D-Sub Cable 1 m
CA-0915	9-Pin Male-Female D-Sub Cable, 1.5 m
CA-PC09F	9-Pin Female D-Sub Connector with Plastic Cover
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1 m)