

## USB to RS-422 CONVERTER

The model USB-422 Converter is an intelligent module which connects to a PC Universal Serial Bus port providing a high-speed asynchronous RS422 serial port. The USB-422 Converter provides easy connectivity between the PC and standard serial communication ports, not requiring PC reconfiguration, assignment of IRQs or jumper settings.

### SYSTEM REQUIREMENTS

- A PC with a minimum of a 75MHz Pentium, or equivalent
- A minimum of 16M bytes of RAM
- One available USB type port compliant with USB1.1
- Drivers are included on our software master CD that normally ships with ACCES hardware.
- Supported Operating Systems: Windows 98/SE, 2000, Me, XP, Linux - built-in to kernel 2.4.0+, MAC OS/8.2 and higher (including X). Driver information is subject to change. Check with ACCES for updated driver information.

### CONNECTIONS TO SYSTEM

The USB-422 Converter is equipped with a USB cable and a USB type A connector for connection to a PC USB port and a male DB-9 for connection to an RS-422 equipped data or communication terminal.

A shielded cable with two twisted pairs are required for optimal operation. Bias is provided on RX+ and RX- lines. Normally, TX- and TX+ Bias is provided by the connecting RS-422 interface. This Bias is not mandatory.

### INDICATOR

A green LED illuminates to indicate transmission or reception of data over the serial port.

### INSTALLING THE USB-422 CONVERTER

*Note: The RS-422 terminal should not be connected to the converter before the drivers are installed.*

1. Power on your computer. Verify the USB port is enabled. Insert the floppy disc or CD containing the software for the USB-422 Converter.
2. Connect the cable of the converter to the USB port of the PC. (USB-422 is hot-pluggable.)
3. Windows will detect the USB device. Install the driver as described in the next section.

### DRIVER INSTALLATION

1. The "Add New Hardware Wizard" will display. Click "Next". Click: "Search for the best driver..."
2. Select: "Specify a location" and specify the drive letter for the CDROM or floppy drive where you have inserted the software. Click: "Next" to start search.
3. Click "Next" to continue.
4. Click "Finish". At this point Windows has finished installing the USB-422 Converter driver.
5. The USB-422 is detected. Click "Next" to continue.
6. Connect the RS-422 communication terminal to the USB-422 converter.
7. Click on **Start, Settings, and Control Panel**. Double click **System** and click on **Device Manager**. Verify the USB-422 Converter is in the list of COM PORTS as "USB to Serial Adapter".
8. Installation is complete. The PORTS section of Device Manager mentioned in step 7 shows the new COM port number, following the "USB to Serial Adapter:"

**SPECIFICATIONS**

Communication speed	300 to 920K baud
Power consumption	50mA @5volt (power provided by the PC's USB port.)
Temperature Range	0°C to 50°C.
Humidity Range	10 to 90% R.H. Non-condensing.
Modes of Operation	RS-422 Full Duplex (4-wire)
Termination	None
Bias	4.7K resistors as pull-up/pull-down Rx+ and Rx- respectively.

**INTERFACE CONNECTOR:** DB-9, Male**PIN ASSIGNMENTS:**

PIN#	SIGNAL
1	-Rx
2	+Tx
3	-Tx
4	NC
5	GND
6	NC
7	NC
8	NC
9	+Rx

**UNINSTALLING THE USB-422 CONVERTER**

1. Unplug the USB-422 Converter.
2. Insert the converter software diskette or CD.
3. Run the FTDIUNIN.EXE program from the diskette and reboot the PC.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660