

## **USB-COMi-SI-M USB to RS-422/485 Adapter (with Optical Isolation & Surge Protection)**

The USB-COMi-SI-M USB-to-Optical isolated RS-422/485 Serial Adapter is designed to make serial port expansion quick and simple. Connecting to a USB port on your computer or USB hub, the USB Serial Adapter instantly adds a RS-422, or RS-485 serial communication port to your system. By taking advantage of the USB bus, the USB Serial Adapter makes it easier than ever to add serial ports and serial devices to your system with easy plug-and-play and hot plug features.

By plugging the USB Serial Adapter to the USB port, the adapter is automatically detected and installed. There are no IRQ & COM port conflicts, since the port don't require any additional IRQ, DMA, memory as resources on the system. The adapter is powered by the USB port, and no external power adapter is required.

The adapter is designed with an external 4-pin dip switch to set RS-422 or RS-485 mode conveniently, without the need to open the metal chassis. Both a 6-pin terminal block and a DB9 male connector are available for optimal flexibility for serial connection. The adapter also provides a unique feature of supplying power output of 5V/150mA through pin-5 of the terminal block to serial device. The adapter is with DIN rail bracket for industrial environment. Termination and biasing option are available for data transmission lines.

Optical isolation and surge protection are available to USB-COMi-SI-M. The serial line of RS-422/485 port is optically isolated with 2000 volt DC optical isolation. The optical isolation protects your PC from spikes and surges on the RS-422/485 network, by converting the electrical pulse into an optical signal and then changing it back into an electrical pulse. The surges and spikes cannot cross the optical link.

The adapter is built-in surge protector to withstand electrostatic discharge and power surges up to 25KV ESD.

The USB-to-RS-422/485 Adapter provides instant connectivity to RS-422, RS-485 communication devices for POS, factory automation equipment, multi-drop data collection devices, bar code readers, time clocks, scales, data entry terminals, PC to PC long distance communications, ATMs and serial communication in harsh environments. The USB-COMi-SI-M USB to Industrial I/O provides industrial solution requiring single node or multi-drop communications over short and long distance. Complete drivers support Windows XP, 2003, 2000, ME and 9x.



## Features & Specifications

- Model No.: USB-COMi-SI-M
  - Adds one RS-422, or RS-485 serial port by connecting to USB port
  - Installed as standard Windows COM port
  - 2000V DC optical isolation protection
  - 25KV ESD surge protection
  - RS-422 data signal: Tx-, Tx+, Rx+, Rx-, GND, RTS-, RTS+, CTS+, CTS-
  - RS-485 data signal:  
4-wire: Tx-, Tx+, Rx+, Rx-  
2-wire: data-, data+
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- FIFO: 128 byte transmit buffer  
384 byte receive buffer
  - Serial port speed up to 230K bps
  - One DB9 male connector & one 6-pin terminal block
  - Supplies power output of 5V/150mA through pin-5 of terminal block for serial devices requiring power.
  - Full hardware and software flow control
  - Automatic transmit buffer control for 2-wire RS485 half-duplex operation
  - 2KV DC optical isolation protection
  - ESD surge protection (25KV)
  - Monitor LEDs of Power, Tx/D, Rx/D indicating power & port status
  - One external dip switch for easy RS-422, RS-485 mode settings  
-no need to open chassis to set the mode  
-RS-422 mode: 4-wire with handshaking ON, ON, OFF, OFF  
-RS-485 mode: 4-wire full duplex ON, OFF, OFF, OFF, OFF  
-RS-485 mode: 2-wire half duplex with echo OFF, OFF, OFF, ON  
-RS-485 mode: 2-wire half duplex without echo OFF, OFF, ON, ON
  - Serial Communication Parameters  
-Parity: None, Even, Odd  
-Data bits: 7, 8  
-Flow control: RTS/CTS
  - Built-in 120 Ohm termination resistors for Tx/Rx/CTS termination
  - Built-in 750 Ohm biasing resistor for Tx/Rx biasing
  - USB cable of 0.9 meter included
  - Powered by USB port. No external power adapter required.
  - Easy plug & play installation and RS-232/RS-422/RS-485 device connection
  - Works with USB 1.1 & 2.0 host port
  - SECC sheet metal chassis with DIN rail bracket
  - Dimensions: 57mm x 76mm x 23mm  
82mm x 76mm x 23mm (with DIN rail bracket)
  - COM Port Number can be changed to COM1 to COM4 to support HyperTerminal, or any other COM port number required
  - Supports Windows XP, 2003, 2000, ME and 9x