

USBPort/2 & USBPort/4

Isolated RS232/RS422/RS485 USB serial Hub



- 2 or 4 ports 3-in-1 serial interface : RS232/RS422/RS485 (1500V isolation)
- Data rate from 300 Kbps to 3 Mbps on each port
- RS485 automatic line direction control
- Support for 4-wire RS422/RS485 and 2-wire RS485
- Independent TxD & RxD signalling for each port
- USB bus powered or from an external power source (+9VDC to +36VDC)
- Hot "Plug & Play" support, USB 2.0 full speed and USB 1.1 compliant
- Standard COM ports full compatible
- 15 KV ESD protection and HF filtering
- Robust & compact metal case, CE standards, cabinet or 35 mm Din Rail mounting



Introduction

This range of serial to USB solution (USBPort/x) offers performance, simplicity of installation, security, robustness and high reliability at affordable prices.

USBPort/x is proposed in two models : 2 and 4 isolated port with 3 in 1 serial interface RS232, RS422 & RS485 in order to cover all technical requirements of industrial environments.

USBPort/x installation is quite simple as the product is instantly plug & play, it doesn't require any IRQ, DMA or I/O port resources.

Installed serial ports are considered by Windows 2000, 2003, XP, VISTA, SEVEN & Linux operating systems as computer's standard COM ports.

USBPort supports up to 3 Mbps over the serial link. A decimal divider makes it possible to obtain non-standard highly accurate baud-rates.

Technical characteristics overview

| | |
|--------------------------|--|
| Interfaces | 2 or 4 RS232 / RS422 / RS485 asynchronous serial ports for USB 2.0 |
| RS signals | RS232 mode : TxD, RxD, RTS, CTS, DCD, DTR, RI & GND RS422 mode : A, A', B, B' & GND - RS485 mode : AA', BB' & GND |
| Format | Asynchronous 5, 6, 7 or 8 bits per character 1, 1½, 2 stop bits Even, odd, mark, space or no parity |
| Data rate | From 300 Kbps to 3 Mbps on each port |
| FIFOS | TX: 128 bytes, RX: 384 bytes on each port |
| Hand-shake | Hardware hand-shake (RTS/CTS) and/or software hand-shake (XON/XOFF) with automatic line direction control in the RS485 mode. |
| RS connectors | 5-point screw-in terminal for each RS422/RS485 port, male SUB D9 connector for RS232 |
| Protection | 15KV ESD protection with HF signal filtering, CE standards |
| Isolation | 1500Vrms optic isolation on RS422/RS485 serial ports |
| Signaling | 2 LEDs per port to monitor TxD & RxD signals activity, one LED for power supply |
| Power supply | USB bus powered of from an external power source (+9 to +36VDC) on jack or Phoenix connector. USBPort/x enables to chain other USB devices and thus power other USB equipments from the product. |
| Operating systems | Windows 2000, 2003, XP, VISTA, SEVEN and Linux (please consult us for other OS) |
| Consumption | 2.5W for the 2-port version, 3.5W for the 4-port version |
| Configuring | « Plug & Play » equipment, quick & easy Windows installation, RS232 / RS422 / RS485 mode, polarization and line termination are switches configurable. |
| EMC | NF EN 55022 residential emission, NF EN 61000-6-2 industrial immunity |
| Environment | Operating temperature from -40°C to +70°C, storage -40°C to +80°C, 0 to 95% relative humidity without condensation |
| Installation | Metal case for panel mounting, 35 mm Din Rail mounting accessories available optionally |
| Dimensions | USBPort/2: 168 mm (L) x 112 mm (W) x 26 mm (H) USBPort/4: 168 mm (L) x 112 mm (W) x 42 mm (H) |
| Weight | 445 g for the 2-port version, 610 g for the 4-port version |

Ordering references

| | |
|-----------|--|
| USBPort/2 | Isolated 2-port RS232/RS422/RS485 serial Hub, power from USB bus or from an external power source +9VDC to +36VDC, 2 meter USB type A/B cable provided |
| USBPort/4 | Isolated 4-port RS232/RS422/RS485 serial Hub, power from USB bus or from an external power source +9VDC to +36VDC, 2 meter USB type A/B cable and PWS-12 supplied |
| PWS-12 | Optional external power source (+12VDC / 5.5W) for USBPort/2 (required when chaining several devices on the same USB port or when the USB HUB delivers less than 500 mA) |

All the brand names mentioned in this document are trademarks. ACKSYS is constantly looking at ways to improve its products. The current specifications may therefore be modified without notice and the characteristics set out herein should not be construed as creating any contractual obligation. All the products featured herein are designed and manufactured in Europe.