Features

- 8 x RS232/422/485 ports
- USB 2.0 High Speed interface
- 2.5kV isolation per serial port
- USB, serial ports and power supply ESD protected
- Robust metal case
- Ports configuration: via software or DIP-switch
- Serial speed max. 1000(RS232) / 12000(RS485) kbps
- 19-inch and Wall mounting options
- Wide range DC-in 9-54V, 4W
- Easy port expansion via USB-Out type A connector
- Wide range operating temperature (-25°C - +75°C)

Contact Online...

USB-8COM Plus ISO

Quick Link: | Features | More Pictures | Overview | USB Interface | Serial Interface | Software | Power and Environment | Standards | Ordering Information | Options | Packaging |

More Pictures

Click on the thumbnails for the large picture ...

Overview

The modern USB-8COM Plus ISO adapter connects 8 x RS232 or RS422/485 devices to your PC by one USB 2.0 High Speed port. The serial ports are individually isolated for 2.5kV. The serial ports, USB and the power supply are ESD protected, compliant to IEC 61000-4-2 (8kV contact/16kV air discharges). USB-8COM Plus ISO operates self-powered by an external DCin connector for wide range voltage.

All serial ports support RS232, RS422 and RS485 in Full-/Half-Duplex operation modes. The operation modes of the serial ports are either configured by a single DIP switch common for all ports, or for each port individually by software. The configuration also activates built-in RS485 termination if required, no jumpers needed. Standard Drivers are available for all major operating systems. The USB 2.0 High-Speed enables serial data rates of up to 12Mbps in RS422/485 or 1000kbps in RS232 modes. The device also allows every non-standard bitrate up to 3.5Mbps.

A USB-out (type A) connector at the rear side allows easy expansion of serial ports by simple concatenation of further USB-COM Plus modules; we call it "USB-Through" feature. All USB-COM Plus devices can be used to expand the serial ports for NetCom Plus Device Servers.

USB Interface
| **USB-Input** | USB 2.0 High Speed, USB 1.1 compliant |
| **Connector** | USB type B |
| **Protection** | Compliant with IEC 61000-4-2 ESD 8kV contact / 16kV air discharge |
| **USB-Out** | USB 2.0 High Speed, USB 1.1 compliant |
| **Connector** | USB type A (at rear side) |
| **Protection** | Compliant with IEC 61000-4-2 ESD 8kV contact / 16kV air discharge |

### Serial Interface

#### Ports
- 8 x RS232/422/485 configurable by software
- RS485 Termination configurable by software
- Polarization/BIAS not required
- Connector DSub-9 male

For configuration details see below ...

#### Speed
- RS232: 180bps - 921.6/1000kbps
- RS422: up to 12Mbps
- RS485: up to 12Mbps

#### Available Modes
- RS232 full duplex
- RS422 full duplex
- RS485 4-wire, full duplex
- RS485 2-wire, half duplex (bus-mode)

For configuration details see below ...

#### Signals
- RS232: TxD, RxD, RTS, CTS, GND
- RS422: Tx+/-, Rx+/-, GND
- RS485 4-wire: Tx+/-, Rx+/-, GND
- RS485 2-wire: Data+/-, GND

All signals isolated for 2.5kV

#### Protection
- Galvanically isolated 2.5kV
- Compliant with IEC 61000-4-2 ESD 8kV contact / 16kV air discharge

#### Configuration
- Either all ports operate in one common mode, configured by a single DIP switch, or each port is individually configured by a software:
  - Windows: USB-COM Configuration Utility
  - All OS: Terminal Emulation

### Software

#### Driver
- Windows 2000 to Windows 10 (x86 and x64)
- Windows Server 2000 to 2012 (x86 and x64)
- Linux (Kernel 2.6 and later built-in)
- Mac OS X

Installation by automatic download from the Internet

### Power and Environment

#### Power Consumption
- Bus powered: not available
- Self powered: DCin 9 - 54V, 6W

#### USB Supply
- Not available, except for very high power USB ports.

#### DCin Supply
- DCin specs: Wide range 9 - 54V DC, 6W
- Connector: 3-pin industrial Terminal Block (Plus / Minus / Protective Earth)

#### DCin Protection
- Compliant with IEC 61000-4-2 ESD 8kV contact / 16kV air discharge

#### Dimension
- 196×147×44 mm³ (W×L×H)

#### Operating Temp
- −25°C - 75°C

#### Storage Temp
- −30°C - 85°C

#### Case
- SECC sheet metal (0.8mm)
| **Weight** | 0.9kg |
| **Mounting** | - 19-inch Rack  
- Wall mount |
| **LEDs** | LEDs for Power, Ready, serial Tx, Rx |

### Standards

#### Declarations

- CE, FCC

#### EMI

- EN 55022 Class B  
- EN 61000-3-2: Limits of harmonic current emissions  
- EN 61000-3-3: Limitation of voltage changes  
- 47 CFR FCC Part 15 Subpart B

#### EMS (EN 55024)

- EN 61000-4-3: Radiated RFI  
- EN 61000-4-4: Electrical Fast Transient  
- EN 61000-4-5: Surge  
- EN 61000-4-6: Induced RFI  
- EN 61000-4-8: Power Frequency Magnetic Field  
- EN 61000-4-11: Power supply dips

#### ESD

- EN 61000-4-2 4kV contact 8kV air for  
  - Serial Ports  
  - USB  
  - DC Power connector

### Ordering Information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>613</td>
<td>USB-8COM Plus ISO (8x RS232/422/485, isolated, expandable)</td>
</tr>
<tr>
<td>612</td>
<td>USB-8COM Plus (8x RS232/422/485, non-isolated, expandable)</td>
</tr>
</tbody>
</table>

### Options

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6031</td>
<td>DC Power supply adapter 12V @ 1A</td>
</tr>
<tr>
<td>663</td>
<td>5-pin Terminal block adapter to DB9 female</td>
</tr>
<tr>
<td>6061</td>
<td>RJ45 adapter to DB9 female</td>
</tr>
<tr>
<td>661</td>
<td>Serial Null-Modem adapter 9PF-9PF, change male to female</td>
</tr>
</tbody>
</table>

### Packaging

#### Packing list

- USB-8COM Plus ISO device  
- USB 2.0 High-Speed cable  
- Mounting brackets for 19-inch rack  
- Wallmount plates  
- Terminal block for Power Supply  
- CD-ROM with configuration software  
- 4 rubber feet for table mode
Terminal Block Adapter

> Back