



## Features

- USB to serial converter
- Galvanic isolated
- Supports RS232, RS485 and TTL
- One button to change mode
- LED's indicating active state
- Screw terminal connections
- 9pin D-sub for RS-232
- USB Powered
- Selectable termination resistor  
(120 ohm) on RS-485
- Small form factor
- Eliminates ground loop problems



## Product Description

The perfect tool for all engineers and technicians working with equipment using different types of serial interfaces. With the galvanic isolation, the risk for disturbing or destroying the connected equipment is eliminated.

The other great advantage is to have multiple interfaces integrated in one unit. The converter supports the main serial interfaces and uses an industry standard FTDI USB interface (no driver installation required).

Use the “Mode select” button to toggle between the different interfaces. The selected mode is stored in memory which ensures that the unit will remember its current state if powered off. An LED indicates the currently active state/interface.

## Mode Select

At power on, the diode indicating active mode will be blinking, indicating that the user can change mode if desired. After a few seconds, the LED will stop blinking and the unit will be “locked” in current mode.

If the operator wants to change mode after it has been locked, simply press and hold the “Mode Selector” button for 5 seconds.

## Product Specification

**Product code: NSE-3082-01**

### Operation Modes


Mode	Condition	Max Data rate
USB to RS-232	<b>Without termination resistor</b>	< 1 Mbit/sec
USB to 5V TTL		< 115 kbit/sec
USB to 3.3V TTL		< 115 kbit/sec
USB to RS-485 (2-wire)		< 1 Mbit/sec
USB to RS-485 (2-wire)		<b>With 120ohm termination resistor</b> < 1 Mbit/sec

### Connections

Interface	Connector
USB (PC interface)	USB female - Type B
RS-232	Male 9-pin D-Sub / Terminal Block
5V TTL	Terminal Block
3.3V TTL	Terminal Block
RS-485 (2-wire)	Terminal Block
RS-485 (2-wire) – With 120ohm resistor	Terminal Block

### Pinout

Pin (Term. Block)	Connection (Terminal Block)
1	GND
2	+5V (50mA max)
3	TTL RX
4	TTL TX
5	485 B / +
6	485 A / -
7	232 RX
8	232 TX



Pin (DSub)	Connection (DSub)
1	N.C
2	232 RX
3	232 TX
4	N.C
5	GND
6	N.C
7	N.C
8	N.C
9	N.C

### Dimensions

85 x 51 x 24mm (L x W x H)

### Where to buy

[sales@nse.no](mailto:sales@nse.no) | [www.nse.no](http://www.nse.no)