Expert OptoBridge

Problems during data transmission?
Afraid of damages to the serial port?

No problem with *Expert OptoBridge*!

DESCRIPTION

Expert OptoBridge allows the galvanic separated connection of devices with a serial port (RS232) to the serial port (RS232) of the PC. Because of the electric isolated transmission a maximum protection against breakdown and damage to the serial port is ensured. Sometimes this module can replace a much more expensive modem in an industrial environment.

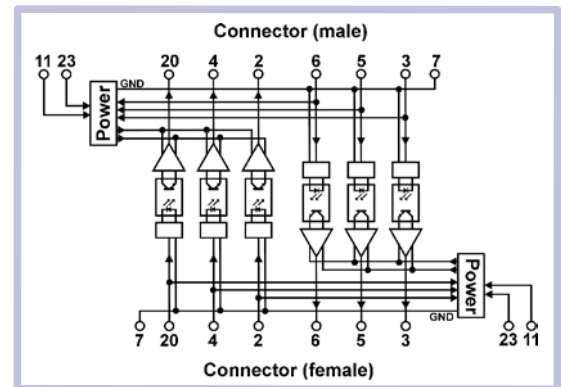Typical problems which can lead to troubles with the serial port and data tansmissions are:

- Over voltage caused by distant lightning
- Over voltage caused by electrostatic discharge
- Ground shift because of different main supplies
- Hazard voltages on ground wires caused by electric engines or similar consumers

TECHNICAL DATA

Besides the two data lines (receiver and transmitter data) two hand-shake lines are supported in both directions. The connections to *Expert OptoBridge* are corresponding to the serial port of an industrial standard PC (see also circuit diagram).

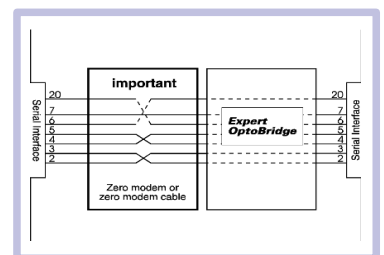|	
Interface:	25 pin RS232 connectors (male and female)
Input voltage:	-15V to -6V for logical 1 / +15V to +6V for logical 0
Data transmission rate:	300 to 115,000 Bits/s
Dimensions:	64 x 54 x 16 mm (L x W x H)

Circuit diagram of *Expert OptoBridge*

CONNECTION

After having connected *Expert OptoBridge* to the serial port it can be used immediately. For data transmission a zero modem must be used (see box). *Expert OptoBridge* can be used without external power supply if all three driving data lines are connected at each side.

The pins of the driving data lines are:
- 20, 4, 2 on the female connector
- 6, 5, 3 on the male connector

Possibilities to apply external voltage:
- Voltage between pin 11 and pin 23: Any voltage between ±7V and ±14V, without connecting power to the GND
- Pin 11 or 23, any voltage between ±7V and ±14V, related to GND (GND: pin 7 - pin 15 possible)

Connection of *Expert OptoBridge*

CONTACT

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