

## Interface converter DI-2

RS-232 / RS-485 interface converter



### Device features

- Plastic enclosure for DIN rail mounting
- Electrical separation between the input and output circuit
- Supply voltage DC 10...30 V

### Product description

The DI-2 converter is capable of connecting personal computers and workstations utilizing an RS-232 interface with BENDER devices utilizing an RS-485 interface. The hardware and software of the computers need not to be changed. A typical application is the connection of a personal computer to a BMS network.

### Application

- RS-232 signals are converted into RS-485 signals
- Parameterization of alarm indicator and operator panels (PRC1470) utilizing an RS-485 interface via PC, RS-232 interface with software

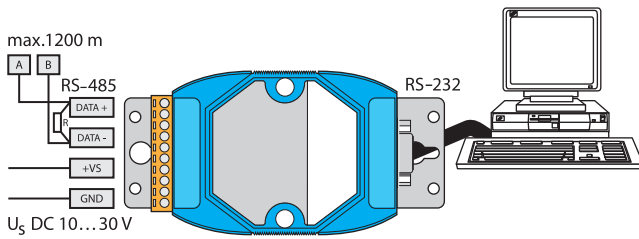
### Function

Most industrial computers (PCs and workstations) come as standard with RS-232 serial ports. Though widely accepted, RS-232 has limited transmission speed, range and network capabilities. The RS-485 / RS-422 standard overcomes these limitations by using different voltage levels for data and control signals. The connected devices are protected against spikes by electrical separation between the input and output circuit (DC 3000 V). Additional internal measures protect the device against voltage spikes.

### Approvals



**Wiring diagram (example)**



DI-2 for the integration of a personal computer utilizing an RS-232 interface into a BMS network.

**Note:**

- Terminate both ends of the BMS bus with 120 Ω resistors (R).

**Technical data DI-2 interface converter**

<b>Insulation coordination acc. to IEC 60664-1</b>	
Rated voltage	
Rated impulse voltage / pollution degree	3 kV / 3
<b>Supply voltage</b>	
Supply voltage $U_s$	see ordering information
Power consumption	≤ 2.2 W
<b>Interfaces</b>	
<b>BMS</b>	
Interface / protocol	1 x RS-485 / --
Baud rate	9.6...115.2 kbit / s
Cable length	≤ 1200 m
Recommended cable (shielded, shield on one side connected to PE)	J-Y(ST)Y min. 2 x 0.6
Mode	
Connection	
Terminating resistor	120 Ω (0.25 W)
Device address, BMS bus	--
Serial interface	1 x RS-232
Alarm LEDs	ON
<b>General data</b>	
EMC immunity	acc. to EN 61000-6-2
EMC emission	acc. to EN 61000-6-4
Classification of climatic conditions acc. to IEC 60721	Stationary use 3K5
	Transport 2K3
	Long-term storage 1K4
Operating temperature	- 10 °C...+ 55 °C
Classification of mechanical conditions acc. to IEC 60721	Stationary use 3M4
	Transport 2M2
	Long-term storage 1M3
Operating mode	continuous operation
Mounting	any position
Connection	screw terminals
Connection properties	
rigid / flexible / conductor sizes	0.5...2.5 mm <sup>2</sup> / AWG 22...12
Degree of protection, internal components (IEC 60529)	IP30
Degree of protection, terminals (IEC 60529)	IP20
Screw mounting	2 x M3
DIN rail mounting acc. to	IEC 60715
Instruction leaflet	BP109010
Weight	≤ 160 g

**Ordering information**

Type	Supply voltage $U_s$	Art. No.
DI-2	DC 10...30 V*	B 9501 2022

\* Absolute value

**Dimension diagram DI-2**

Dimensions in mm

