

7MF4997 - 1DA

Edition : 03 / 00

Interface for the connection of HART instruments to a PC

### Application

With the interface (HART-modem) it is possible - using the respective software - to communicate from a PC via its serial interface with the HART instrument.

The scope of supply includes :

- Interface with 9-pole serial connector DB-9
- 2-wire connecting cable with test clips
- Users' manual ( german / english )

### Working principle

The interface requires very little energy to be notebook-compatible. The instrument is galvanically isolated (1500 VDC) and conforms entirely to HART standards.

The interface gets its source of energy from the computer's RS 232 interface, thus eliminating the need for external power supply.

The instrument is protected against reverse polarity, and each test clip can be connected to the plus or minus pole. The direction of the current flow does not have to be measured.

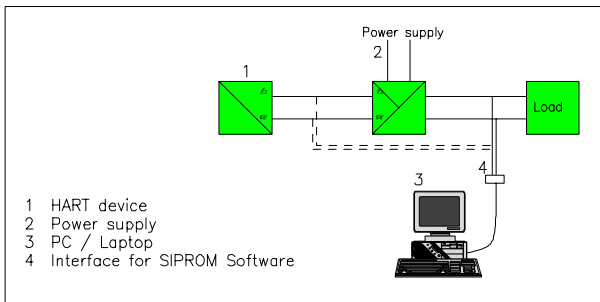


Fig. 2 : Connection of the interface

### Requirements for Hard- und Software

- Computer with at least one serial interface (RS 232)
- 9-pole DB-9 plug on at least one serial interface
- Operating software which supports the RS 232 serial interface
- User software for communication with HART instruments  
e.g.
- SIMATIC PDM

The interface was tested on the above mentioned combinations.



Fig. 1: Interface

### Technical Data

<b>Power supply</b>	no external power supply needed Power supply via RS 232 (+/- 4V to +/- 12 V)
<b>Supply current</b>	1,5 mA per +/- 4 V inputs 4,0 mA per +/- 12 V inputs Power is drawn equally from all RS 232 inputs, regardless of state. Supply current does include current load on output pins
<b>Output level</b>	fully HART compliant 0,5 +/- 0,1 Vpp trapezoidal wave at 1200 / 2200 Hz
<b>Isolation</b>	1500 VDC between instrument and computer
<b>Software - requirements</b>	MSDOS Version 5.0 or higher or equivalent OS that supports serial COM - Port
<b>Environmental Specifications</b>	Temperature Operating 0 ° to +50 °C Storage -40 ° to +85 °C Humidity 0 to 95 %, non condensing
<b>CE - approval</b>	yes
<b>Housing</b>	Dimensions 50 x 34 x 15 mm Weight 70 g
<b>Connector cable</b>	twisted pair wire 1,80 m with test clips Polarity insensitive termination

### Ordering data

Name	Ordering no.
Interface for SIPROM Software	7MF4997 - 1DA Stock item