


## Characteristics

15 - INTERFACE - COMMUNICATION -

	- Active operation:	current loop is supplied too
	- Passive operation:	used in an existing current loop
	- PC interface:	virtual serial port
	- Supply:	out of USB connection
	- Current consumption:	175...275 mA
	- Connection HART:	alligator clip
	- Connection PC:	USB type A
	- USB specification:	2.0 compatible
	- Protection:	IP20
	- Galvanical insulation:	between USB and HART
	- Case:	ABS, 105x66x20 mm

## Technical Data

### HART

Electrical coupling:	capacitive
Output level:	900 mVpp across 250 $\Omega$
Input sensitivity:	200 mVpp
Leakage current:	<10 $\mu$ V
Data rate:	1200 bps (brutto)
Modulation:	FSK (1,2 kHz = bit „1“ / 2,2 kHz = bit „0“)
Insulation voltage:	250 V AC/DC
Galvanical insulation:	between HART and USB circuit

### USB

Specification:	USB 2.0
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### PC

Operating system:	Windows XP, W7, W8
Software interface:	virtual serial port
Driver:	FTDI USB to COM universal driver

### Connection

USB:	
PC:	USB type A
Modem:	USB mini, 5-pole (standard)
Cable length:	1,5 m
HART:	
HART circuit:	alligator clips
Cable length:	1,5 m

### Software (included)

HART-Tool:	graphical, menu-driven user interface
COM interface:	virtual serial port (USB to COM)

## Applications

The HART modem can be used together with a PC and the software tool for putting into operation, configuration, analysis of signals, data backup and documentation of a corresponding field device. The integrated current loop supply make possible a standalone operation to do the configuration (transmitter is supplied too).



## ● Technical Data (Continued)

### Supply

Modem:	
Voltage:	5 V out of USB port
Current consumption:	175...275 mA
HART circuit:	
Voltage:	18...25 V
Current:	23 mA maximum (short circuit proof))

### Environmental Conditions

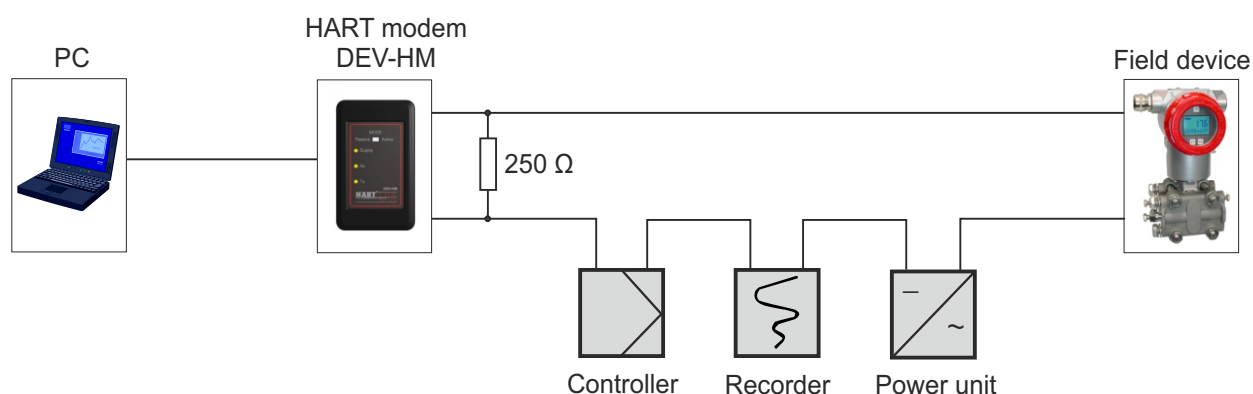
Operating temperature:	0...+50°C
Storage temperature:	-40...+85°C
Air humidity:	0...99%, not condensing
CE-mark:	EMC directive 2004/108/EG EN 61326

### Mechanics

Case:	
Dimensions:	105x66x20 mm
Material:	ABS
Protection:	IP 20
Weight:	approx. 200 g (with connection cables)

## ● Examples for Connection

HART modem in passive mode, external communication resistance in current loop circuit



HART modem active, no external resistance, current loop is supplied out of modem



## ● Items Delivered



Modem with  
HART cable



USB cable



Software

HART modem, cables, software

Order No.: 01310-00220