

FIELD CONFIGURATOR AND USB-HART MODEM FOR TRANSMITTERS WITH HART AND LHP COMMUNICATION



- **Adjustment of the range of HART and LHP Instruments** by setting the numerical value or calibration on the input value.
- **Display of momentary input and output values** of connected instrument, and up to three other variables.
- **Testing a current loop** and zero setting a (pressure) sensor.
- **Changing notes, units, damping, etc.**
- **Power supply for transmitter** without any external power supply unit.
- **Configurator powering** from an accumulator, USB or a prismatic battery. Up to 15 hours of continuous operation.
- Using the instrument as a **HART-USB modem**.



Application

LHPConf and HARTConf handheld configuration devices are intended for reading, adjusting and changing the configuration of instruments with LHP and HART communication. These devices communicate with instruments connected in a current loop or they can supply these instruments being adjusted directly from their internal current supply unit. Therefore, they can be used for the adjustment of instruments before their installation, and before putting them into operation without connecting them necessarily to a power supply unit. The internal power supply unit for a transmitter can be switched off, permanently switched on or switched into standby mode, when the power supply is switched on only for the moment the communication is in progress, and then it is switched off again. This mode of operation can significantly extend the operating period in case the device is supplied from an accumulator or a battery. The configurator and its functions are controlled by means of push buttons and a colour graphic display.

Function of the HARTConf configurator

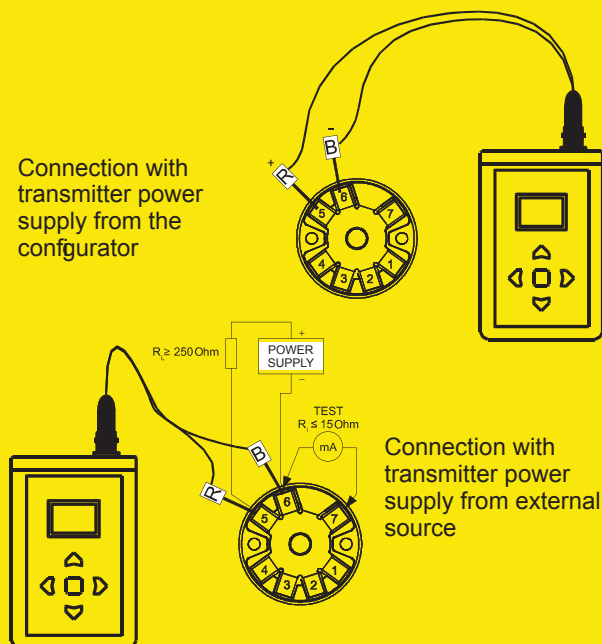
The HARTConf configurator is an instrument that combines a handheld device with HART or LHP communication and an intelligent HART-USB modem. It enables one to communicate with instruments equipped with HART communication at the level of universal and common practice commands. Therefore, the output range of any HART instrument can be changed. It also includes all functions of a LHP configurator, and it can therefore be used for the adjustment of all parameters of LHP transmitters.

It is supplied from a 9V accumulator, which can be charged from a USB port. After connection to the USB port, the configurator is supplied through this port, which provides all necessary energy. The device is able to supply the transmitter from its own internal power supply unit both in the configurator mode and the HART-USB Modem mode. Transmitter power supply can be permanently switched off, switched on or used a power saving mode, where device will be switched on only for the time of communication.

Display preview:



Connection with transmitter power supply from the configurator



Connection with transmitter power supply from external source

Field configurator and USB-HART modem for transmitters with HART and LHP communication

Functions of the LHPConf configurator

It only contains the LHPConf configurator function and does not support connection to device with HART communication. In instruments with LHP communication, the device allows to adjust all available parameters except for user linearization. It can visualize momentary input and output values and max. three other variables, as well as test an output current loop, etc. It contains the function of a transmitter supply, and operation with a transmitter therefore does not require any external power supply unit. Transmitter power supply can be permanently switched off, switched on or used a power saving mode, where device will be switched on only for the time of communication. The LHPConf configurator is a device using only a 9V primary battery as a power supply unit.

Technical parameters

Supply voltage

battery 9V (6LR61, 6F22) or accumulator 8.4V,
USB (only HartConf)

Ambient temperature:

-20 to +50 °C

Protection:

IP 40, connectors IP 00

Humidity:

0 to 80% RH

Connection of the HART cable:

BNC connector, negative pole of voltage for a transmitter is on the connector jacket

Dimensions:

112.5 x 65 x 32 mm

Material of cases:

Black ABS

Weight:

85g without battery

Working position:

Arbitrary

Interface LHP / HART:

Communication protocol:

HARTConf	HART, rev.5, LHP
LHPCConf	LHP

Transmitter supply voltage:

Min. 12 VDC / 22mA, switch-on /
switch-off / energy saving mode

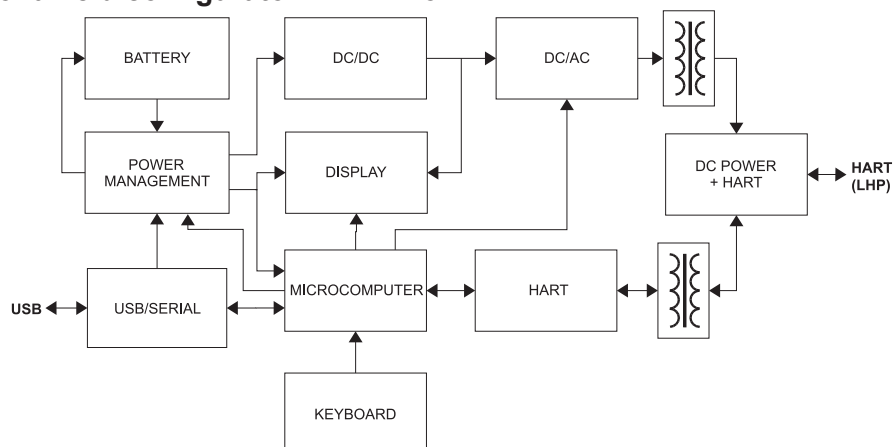
USB interface (only HARTConf):

USB standard	USB 1.1
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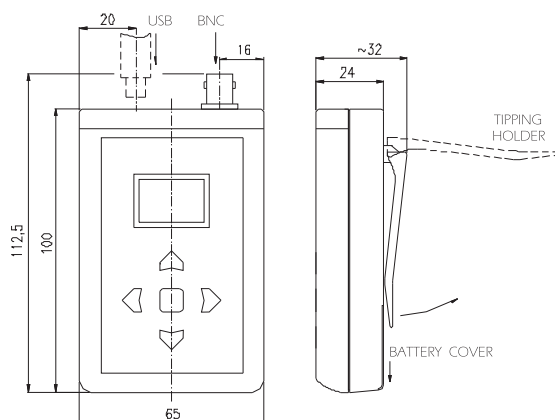
Max. power demand from USB interface:

- With transmitter supply: 140mA
- Without transmitter supply: 30mA
- Battery charging: 100mA

Block diagram of a field configurator HART®Conf:



Dimensional drawing:



Typ	Description
• LHPConf →	Field Configurator for Transmitters with LHP Communication, Function of Transmitter Supply, without Charging
• HARTConf	HART-USB Modem and Field Communicator for LHP and HART Transmitters, Function of Transmitter Supply Supplied from USB or Inbuilt Accumulator, Charged from USB
Code	Optional Accessories (only for HARTConf)
• HARTWinConf	Set-up Program HARTWinConf (CZ+EN) for PC (WIN98/ME/2000/NT/XP/Vista)
SIMATIC-PDM	Set-up Program SIMATIC PDM V6.0 Single Point (1 TAG), for all HART Transmitters (WIN2000/XP)
Example of Order: LHPConf	

- Ex Stock Version