

HARTConf, LHPConf Field Configurators and HART-USB Modem for Transmitters with LHP or HART 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 of a 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
- Language versions CZ, EN, DE and other on request



Application

HARTConf and LHPConf handheld configuration devices are intended for reading, adjusting and changing the configuration of instruments with HART and LHP 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.

Functions 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, it is possible to change the output range of any HART instrument, display actual value of input, output and up to three other variables. It is possible to test a current loop, do a zero setting of a pressure sensor, change text items etc. All available configuration parameters can be set in HART-USB Modem mode with suitable PC software (software is not included with HARTConf). 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 9 V 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.

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. LHPConf configurator is supplied from a 9 V battery by default. If the accumulator is used instead of battery, it is possible to charge the device by connecting to the USB port or AC adapter. After connection to the USB port, the configurator is supplied through this port, which provides all necessary energy.

Technical specifications

Supply voltage:

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

Ambient temperature:

-20 to +50 °C

Housing:

IP40, connectors IP00

Humidity:

0 to 80 % r.v.

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 case:

Black ABS

Weight:

85 g without battery

Working position:

Arbitrary

HART / LHP interface

Communication protocol:

HARTConf	HART, rev.5, LHP
LHPConf	LHP

Transmitter supply voltage:

min. 12 V_{SS} / 22 mA, switch-on / switch-off / energy saving mode

USB interface

USB standard:

USB 1.1

Max. power demand from USB interface:

With transmitter supply:

140 mA

Without transmitter supply:

30 mA

Battery charging:

100 mA

5.2 Supplementary parameters

Electric strength of insulation between the HART / LHP interface and USB interface:

1000 VAC / 1 min. (test)

Typical times of operation in different working modes:

Operated from the accumulator with permanent transmitter supply:

2 hours

Operated from a primary battery with permanent transmitter supply:

4 hours

Operated from the rechargeable battery without transmitter supply:

8 hours

Operated from a primary battery without transmitter supply:

15 hours

Operated from an USB port:

unlimited

Charging time of rechargeable battery through an USB port:

10 hours

Indication of battery charge:

Continuous, with a battery charge symbol on the display

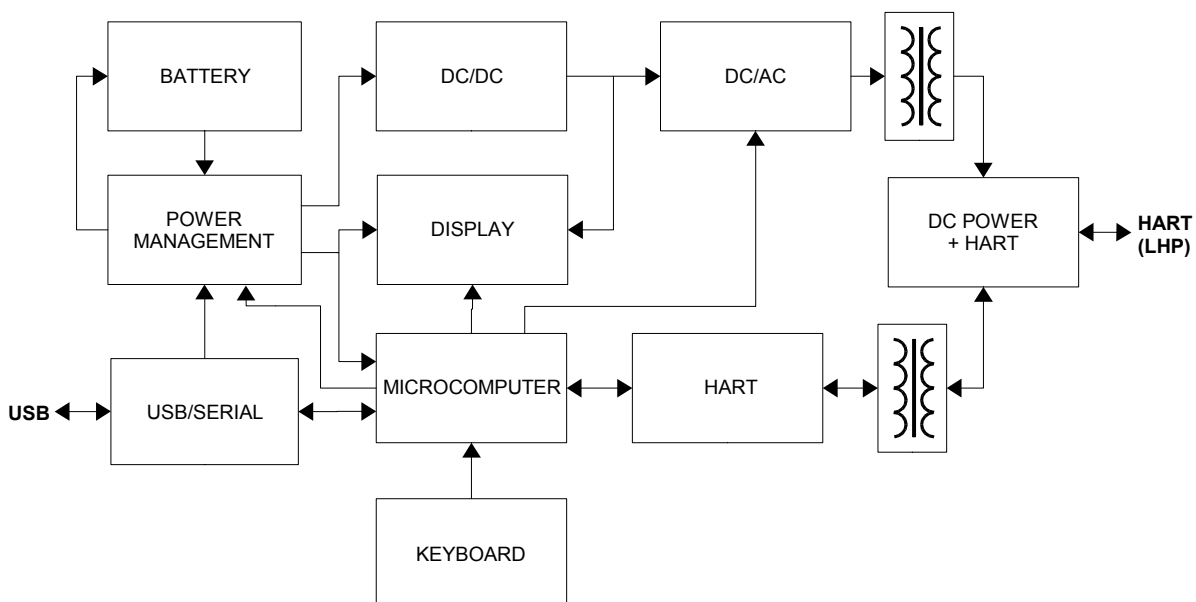
Indication of transmitter supplying switch on:

Symbol of a battery on the display

Electromagnetic compatibility:

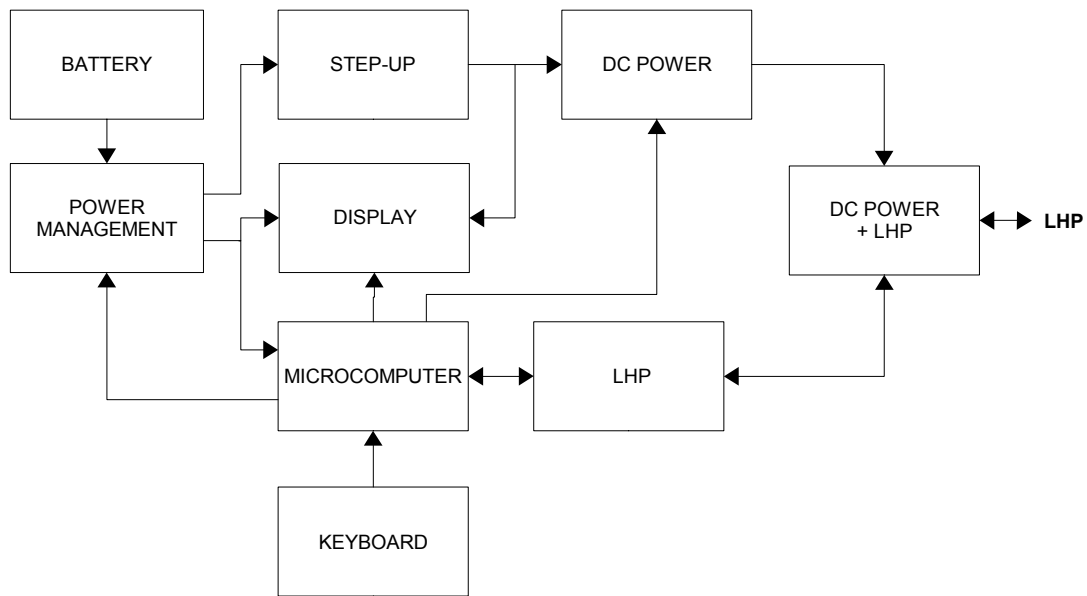
Emissions and resistance acc. to EN 61326-1 (industrial environment)

Block diagram of a field configurator HARTConf

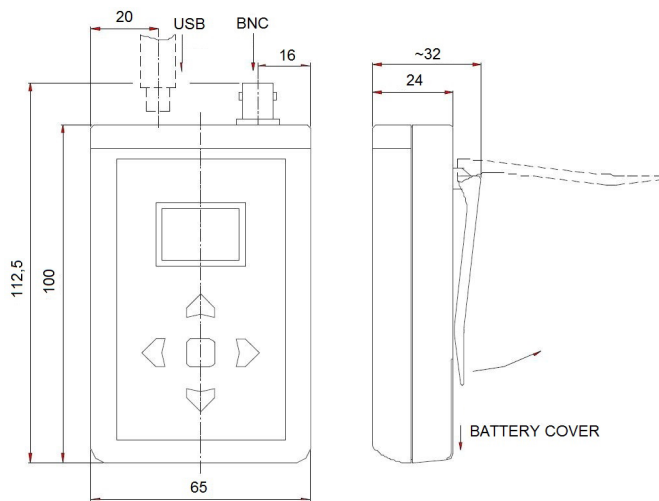


Field configurators and HART-USB modem for transmitters with HART or LHP communication

Block diagram of a field configurator LHPConf



Dimensional drawings



Type	Description
• LHPConf	Field handheld configurator for transmitters with LHP communication, function of transmitter supply
• HARTConf	HART-USB modem and field handheld configurator for transmitters with HART and LHP communication, function of transmitter supply, supplied from USB or accumulator, charged from USB
Code	Language
• CZ	Czech
• EN	English
• DE	German
Code	Optional accessories (only for HARTConf)
• HARTWinConf	PC configuration software HARTWinConf (CZ+EN) (WIN XP/Vista/7/8)

Example of order: LHPConf ED

- ... Ex stock version