LHPConf a HARTConf
Field Configurators and HART-USB Modem
for Transmitters with HART or 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 of 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. LHPConf Configurator is designed for transmitters with LHP communication and allows to set all configuration parameters. It has simplified circuits and does not contain USB interface nor battery charging circuits. It can be powered only from the 9 V flat battery. Configurator HARTConf is designed for transmitters with LHP communication, as well as for transmitters with HART communication. It has all the function as LHPConf configurator and also includes USB interface and can be powered from the battery. USB interface can be used as a power source to charge the battery and for the USB-HART modem function. The configurator and its functions are controlled through a graphical color display and buttons.

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 is supplied as standard from a 9V accumulator, which can be charged from a USB port. It enables 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 includes a transmitter power supply function, therefore it does not require an external power supply for work with the transmitter in configurator and HART-USB modem mode. After connection to the USB port, the configurator is supplied through this port, which provides all necessary energy. Transmitter power supply can be switched off, permanently switched on or is possible to use power saving mode in which the power is switched on only for communication, and then turns off. By using power saving mode is possible to preserve the battery. Charging the battery can be done by connecting to the USB port.

Functions of the LHPConf configurator

Configurator LHPConf is powered only by 9 V battery. It contains only LHP configuraton functions and does not allow connect devices with HART communication. LHPConf allows to set all adjustable parameters for devices with LHP communication. It includes a transmitter power supply function, therefore it does not require an external power supply for work with the transmitter. Transmitter power supply can be switched off, permanently switched on or is possible to use power saving mode in which the power is switched on only for communication, and then turns off. By using power saving mode is possible to preserve the battery.

Technical parameters

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

Ambient temperature:
-20 to +60 °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
LHPConf LHP
Transmitter supply voltage: Min. 12 VDC / 22mA, switch-on / switch-off / energy saving mode

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USB interface (only HARTConf):
USB standard   USB 1.1
Max. power consumption from USB interface:
- With transmitter supply: 140mA
- Without transmitter supply: 30mA
- Battery charging: 100mA

Supplementary parameters

Electric strength of insulation between the HART interface and USB interface:
1000 VDC / 1 min (test)
Typical times of operation in different working modes:
- Operated from the rechargeable battery 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 through an USB port: 10 hours
Indication of battery charge:
Continuous, with a battery charge symbol on the display
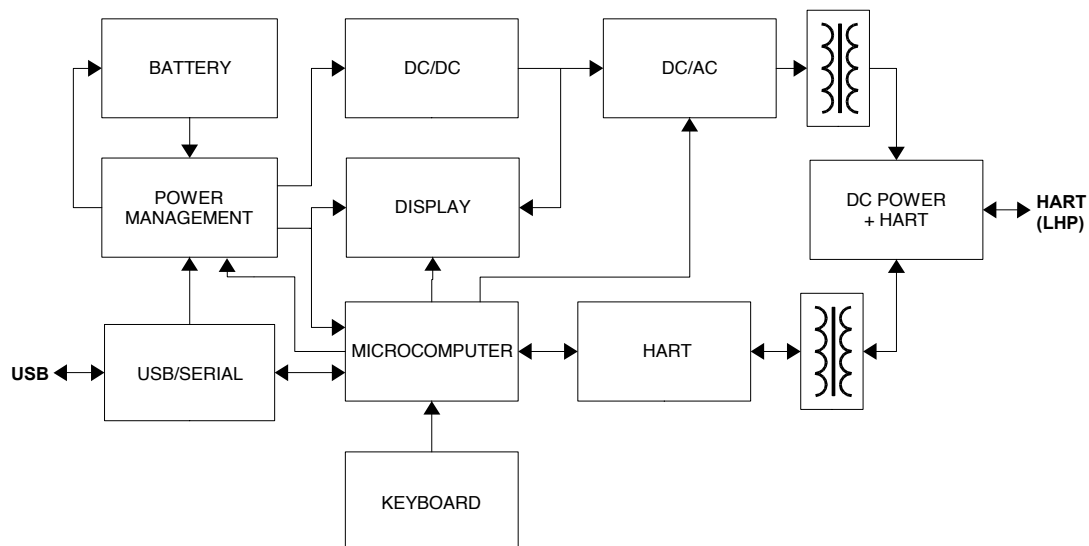**Indication of transmitter supplying switch on:**
Symbol of a battery on the display
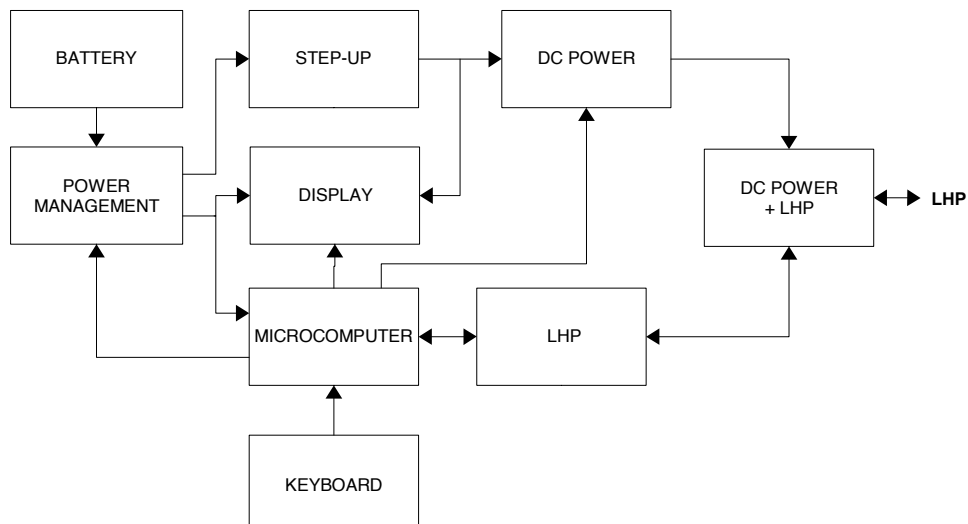**Electromagnetic compatibility:**
Emissions and resistance acc. to
EN 61326-1 (Industrial environment)

Block diagrams
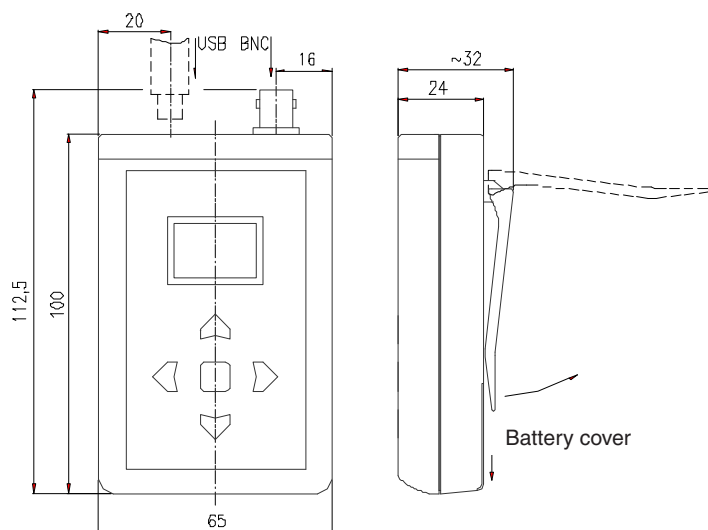
Block diagram of a field configurator HARTConf

Block diagram of a field configurator LHPConf

Dimensional drawings

Battery cover

Type	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	**Language**
• CZ	**Czech and English, Czech preset**
• EN	**Czech and English, English preset**
• ED	**English and German, English preset (only for HARTConf)**
• DE	**English and German, German preset (only for HARTConf)**
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 (EN) V6.1 Single Point (1 TAG) for all HART transmitters (WIN2000/XP)**
Example of order: LHPConf ED	

• ... Ex stock version