Programming unit
VIATOR® HART® modems
Model PU-H

WIKA data sheet SP 10.12

for further approvals
see page 5

Applications

- Personal computer HART® modem
- Communicates with all registered HART® field instruments
- Operates with most PC-based HART® communication-compliant software

Special features

- Compact, rugged case
- CE mark for sale in Europe
- Integral HART® cable with two test clips
- Transformer isolation
- Different connections depending on model: Bluetooth®, USB and RS-232

Fig. left: VIATOR® HART® USB
Fig. centre: VIATOR® HART® USB PowerXpress™
Fig. right: VIATOR® HART® RS-232

Description

Overview
The VIATOR® HART® modem is a PC communication link to HART® networks for commissioning, servicing, calibrating, or acquiring data from any HART® instrument or transmitter. The modem operates on low power, is isolated, and fully HART®-compliant.

Software driver
The VIATOR® modem software provides the link between the HART® instrument and the personal computer. The software driver is included with every modem and can be downloaded from the manufacturer.

Designed for easy use
The modem is enclosed in a small, rugged ABS plastic case, suitable for the industrial environment. The modem connects to your computer depending on the version with a Bluetooth® connection, a short integral cable terminating in a USB A connector or a RS-232 connector, and connects to a field instrument with an integral cable terminating in two test clips.

Compatibility
The modem is compatible with the following 32- and 64-bit Windows® operating systems:
- Windows® XP and Vista
- Windows® 7, 8 and 10

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.
VIATOR® is a registered trademark of Pepperl+Fuchs GmbH.

WIKA

Part of your business

Model overview

VIATOR® HART® USB

VIATOR® HART® USB PowerXpress™

VIATOR® HART® RS-232

VIATOR® HART® Bluetooth® Ex

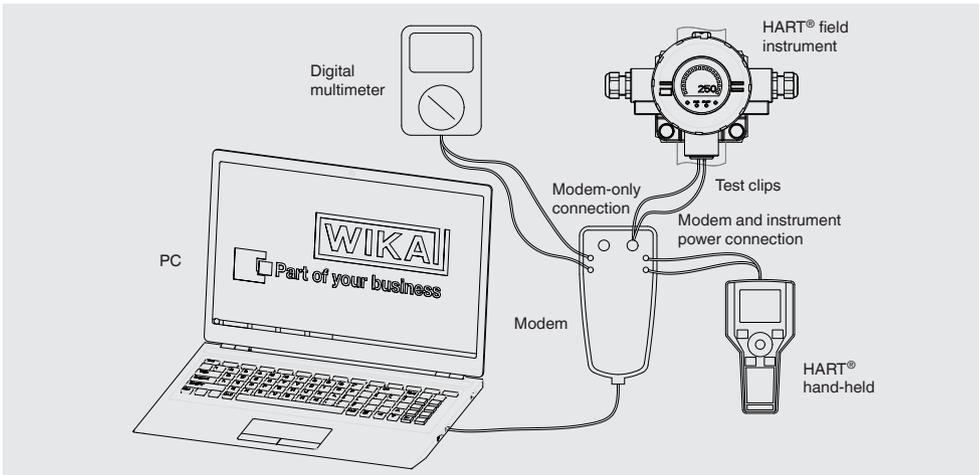| Model	Description
VIATOR® HART® USB	Interface for commissioning, calibrating, and acquiring data from HART® field instruments
VIATOR® HART® USB PowerXpress™	Interface for commissioning, calibrating, and acquiring data from HART® field instruments
VIATOR® HART® RS-232	Interface for communication with HART® field instruments
VIATOR® HART® Bluetooth® Ex	Interface for wireless communication between PC host and HART® field instruments

Specifications

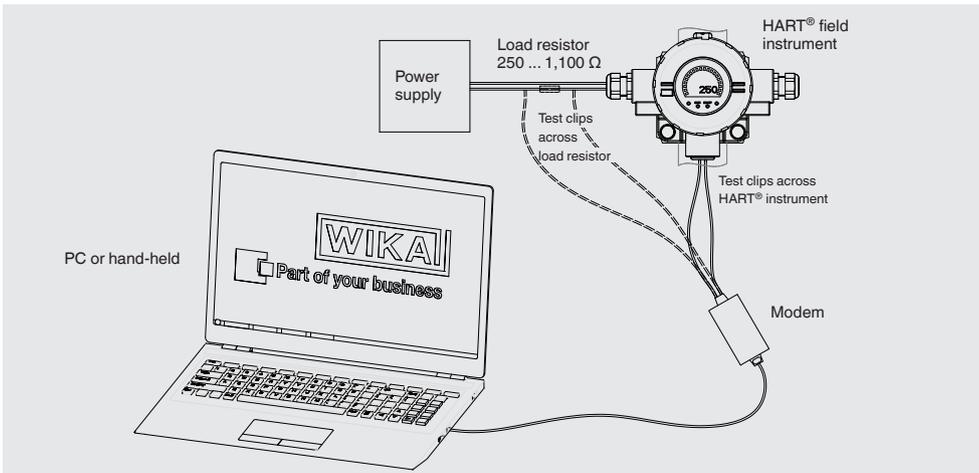| Specifications	VIATOR® HART® USB	VIATOR® HART® USB PowerXpress™	VIATOR® HART® RS-232
Supply			
Input current	30 mA at 5 V	30 mA at 5 V for modem only 255 mA at 5 V with instrument power and modem	1.5 mA at 4 V 4 mA at 12 V
Power supply	■ Supply of modems from USB port ■ External voltage supply for transmitter required	Supply of modem and transmitter from USB port	■ Supply of modem from DTR or RS-232 port ■ External voltage supply for transmitter required
Interface type	USB port	USB 2.0 port or higher	RS-232 port
Output signal	0.5 ±0.1 Vpp trapezoidal wave at 1,200/2,200 Hz DC 24 V at 40 mA to instrument		0.5 ± 0.1 Vpp trapezoidal wave at 1,200/2,200 Hz
Galvanic isolation output/interface	DC 1,500 V	DC 500 V	DC 1,500 V
Operating system	32-bit Windows® XP, Windows® 32-bit Vista, 32- and 64-bit Windows® 7, Windows® 8 and Windows® 10		Operating system that supports serial COM port
Ambient conditions			
Operating temperature	-20 ... +50 °C [-4 ... +122 °F]		
Storage temperature	-20 ... +60 °C [-4 ... +140 °F]		
Relative humidity	0 ... 95 %, non-condensing		
Mechanical specifications			
Ingress protection	IP20		
Connection	USB (type A) connector, red and black test clips		DB-9 connector, 2-pin polarity-insensitive test clips
Material	Polycarbonate		
Dimensions	75 x 33 x 15 mm	96 x 47 x 24 mm	49 x 33 x 15 mm
Cable length	1.8 m 2-strand wire terminating in 2 test clips 15.2 cm cable terminating in 1 USB type A connector		1.8 m 2-strand wire terminating in 2 test clips

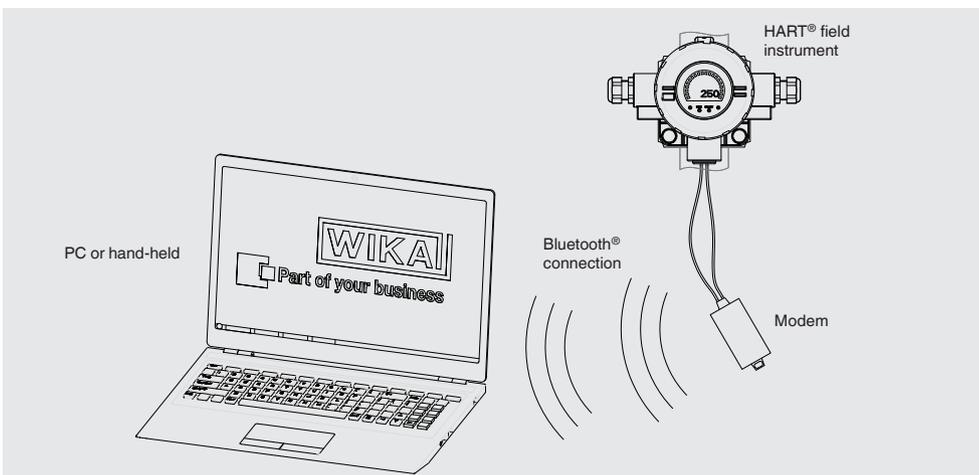| Specifications	VIATOR® HART® Bluetooth Ex
Electrical specifications	
Battery type	3 x AAA-size batteries DC 1.5 V Alkaline cells, type LR03, Energizer® EN92
Operating time	Approx. 20 h (continuous operation)
Interface	
Physical	Bluetooth v2.0, class 1, EDR
Transmitter frequency	2,402 ... 2,480 MHz (Bluetooth®)
Transmitter radiated power	18 dBm
Detection range	100 m in air
Antenna	Integrated omnidirectional
Output signal	HART®-compliant trapezoidal wave at 1,200/2,200 Hz
System requirements	
Hardware requirements	Any PC, PDA, laptop, or other computer with Bluetooth capability
Operating system	Windows®, Windows Mobile® or any OS that supports Bluetooth® COM port
Ambient conditions	
Operating temperature	-20 ... +50 °C [-4 ... +122 °F]
Storage temperature	-20 ... +60 °C [-4 ... +140 °F]
Relative humidity	0 ... 95 %, non-condensing
Mechanical specifications	
Ingress protection	IP20
Connection	HART® I/O interface cable 20 AWG fine-strand Termination test clips
Material	Polycarbonate
Dimensions	88 x 42 x 19 mm
Cable length	0.5 m

Connecting the VIATOR® HART® modems

USB PowerXpress™

USB / RS-232

Bluetooth® Ex / non-Ex

Order numbers

Model	Order number
VIATOR® HART® USB	11025166
VIATOR® HART® USB PowerXpress™	14133234
VIATOR® HART® RS-232	7957522
VIATOR® HART® Bluetooth® Ex	11364254

Approvals

VIATOR® HART® USB, VIATOR® HART® USB PowerXpress™, VIATOR® HART® RS-232

Logo	Description	Country
CE	**EU declaration of conformity** ■ EMC directive ■ RoHS directive	European Union

VIATOR® HART® Bluetooth® Ex

Logo	Description	Country
CE ⟨Ex⟩	**EU declaration of conformity** ■ Radio equipment directive (RED) ■ RoHS directive ■ ATEX directive II 1G Ex ia IIC T4 Ga, -20 °C ≤ T_{amb} ≤ 50 °C	European Union
IEC IECEx	**IECEx (option)** Hazardous areas	International
cULus LISTED	**UL (option)** Safety (e.g. electr. safety, overpressure, ...) Class I, division 1 or 2, groups A, B, C, D T4 Class I, zone 0, AEx ia IIC T4 Ga; Ex ia IIC T4 Ga	USA

Approvals and certificates, see website

Ordering information

To order the described product the order number is sufficient.

WIKA

WIKA Alexander Wiegand SE & Co. KG
Alexander-Wiegand-Straße 30
63911 Klingenberg/Germany
Tel.   +49 9372 132-0
Fax   +49 9372 132-406
info@wika.de
www.wika.de