

Selection of our products

Measuring and controlling products for heating industry



- **JSD 600**
programmable unit for data collection
- **MR51D/C**
two and three-state regulator
- **MR51E**
equitern regulator
- **MR51P**
flowmeter

Programmable regulators for electro-heating devices

- **R101**
programmable regulator for simple processes
- **R251**
programmable regulator for complicated processes
- **R500**
multiband programmable regulator



Accessories and converters



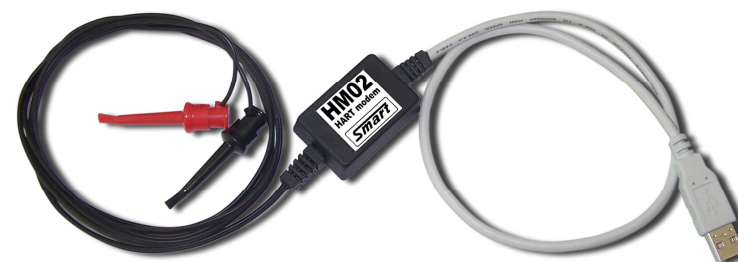
- **HM01**
HART modem for RS232
- **FR01**
converter 0-20 mA to 4-20 mA
- **IRPS**
converter RS232 to current loop
- **PT05**
converter RS232 to TTL

Development and manufacture:
SMART, spol. s r. o.
Purkyňova 45, 612 00 Brno
www.smartbrno.cz



Systémy Měřicí, Analytické a Regulační Techniky

HM02 HART-modem to USB INSTRUCTION MANUAL



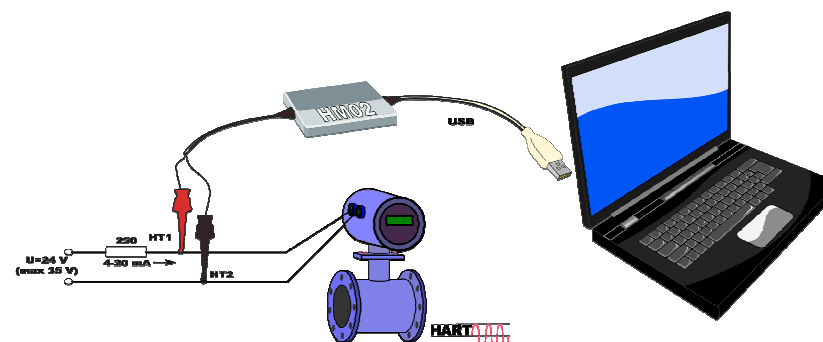
Function of the modem

The modem is connected to PC via USB port through which it is powered as well. Operating SW creates in the computer virtual serial port whereby the application program communicates with connected periphery.

Modem HM02 is mounted in a plastic case, on the USB side it has an A-type connector and on the HART side there are two conductors with isolated measuring hooks. The port on the HART side is symmetrical and it does not depend on polarity. Colored labels of hooks does not make any difference.

The driver has to be installed for each used USB port separately.

Connection of the HART modem

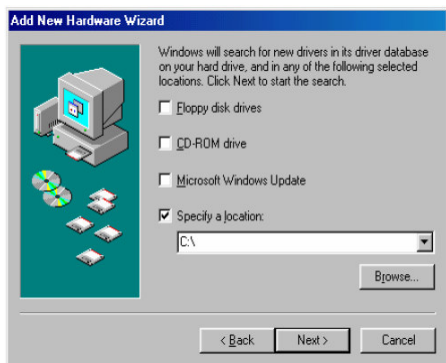


HART-modem and Win 98SE

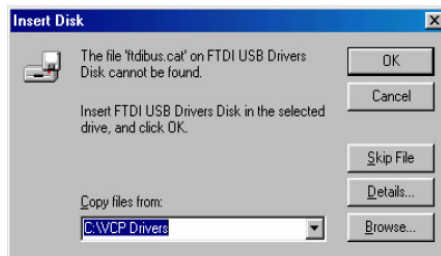
Switch on the computer and then connect PC with HART modem via USB cable. The screen below will appear:



Select „Search for the best driver for your device“ from the options available and then click „Next“ to proceed with the installation.



Check the box next to “Specify location” and uncheck all others.



Click “Browse” and select a directory in which the VCP driver of FTDI is located (e.g. this computer/C:/VCPDrivers) and click OK.



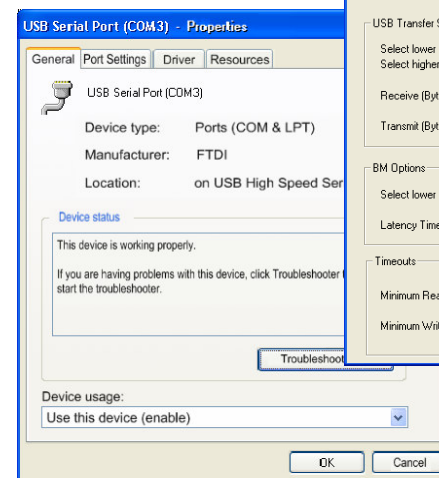
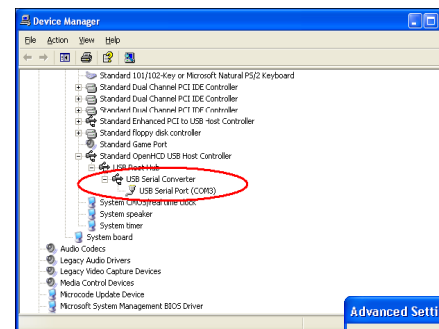
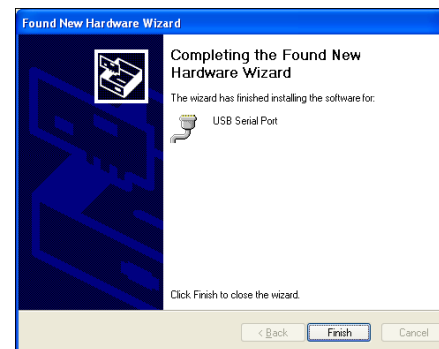
The chosen directory is shown in the dialog box. Now click NEXT.



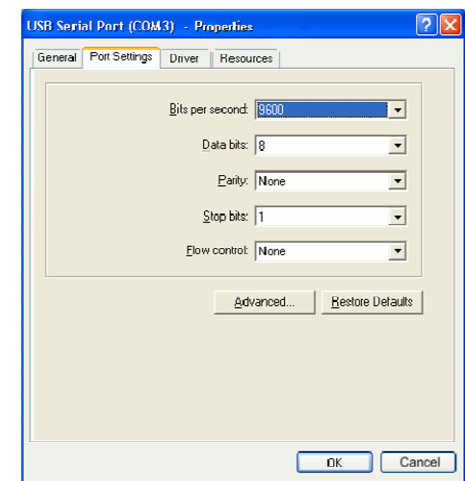
Click NEXT and click FINISH.

Now several similar dialog boxes will be shown and subsequently closed after a while.

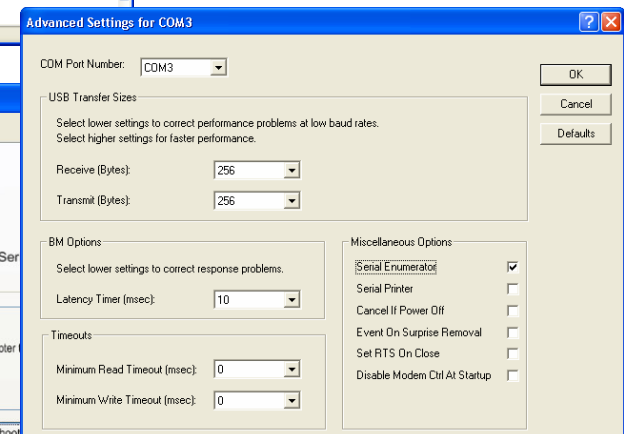
Installation is finished successfully.



Open the „HARDWARE – Device Manager“ tab and select “View devices by type”. Then by clicking on + next to the Ports row the sub menu Ports will be opened, where at the end the USB serial port is stated.



Select by mouse or keyboard the row (USB serial port) so it is marked and click the right mouse button on the selection PROPERTIES - PORT SETTINGS and ADVANCED, and set it according to the pictures.

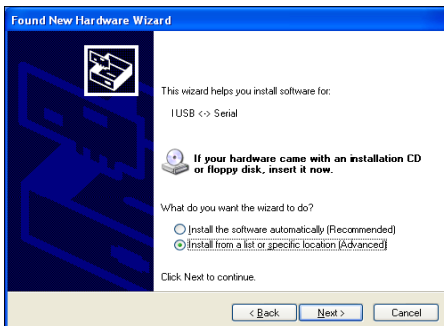


HART-modem and Win XP

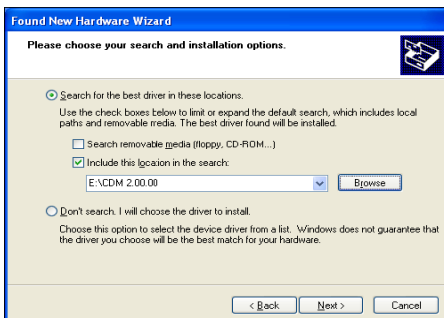
Switch on the computer and then connect PC with HART modem via USB cable. The screen below will appear:



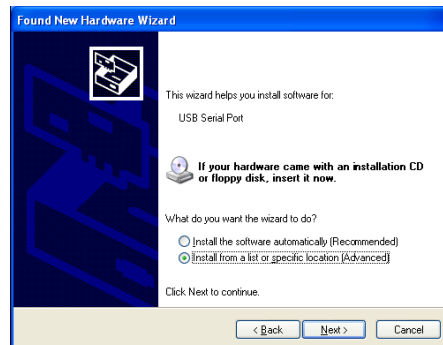
Select „Install from list or given location“ from the options available and then click „Next“ to proceed with the installation. Select a directory in which the VCP driver is located (e.g. E:/CDM 2.00.00) and click OK.



The chosen directory is shown in the dialog box. Then click OK, NEXT and FINISH to complete the installation.

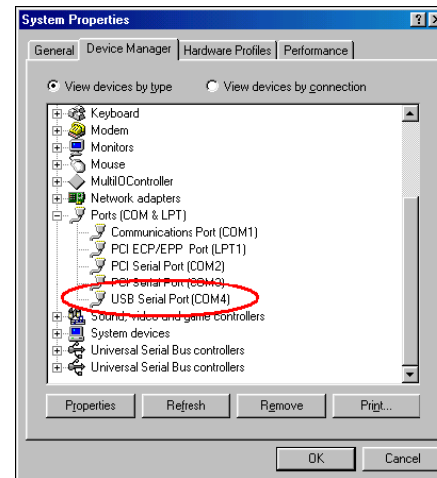


Installation of the converter is finished and in second step the COM-USB port will be installed similarly.



For successful communication of the application following parameters has to be set: number of COM port, transfer rate, control of data flow, parity and number of stop bits. These parameters are set in the Device Manager which can be opened by using a key shortcut which is WIN and PAUSE key.

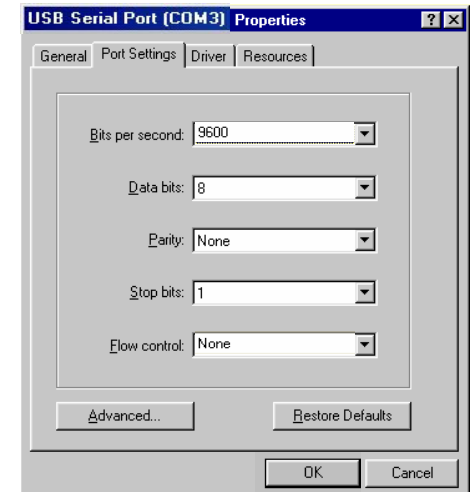
For successful communication of the application following parameters has to be set: number of COM port, transfer rate, control of data flow, parity and number of stop bits.



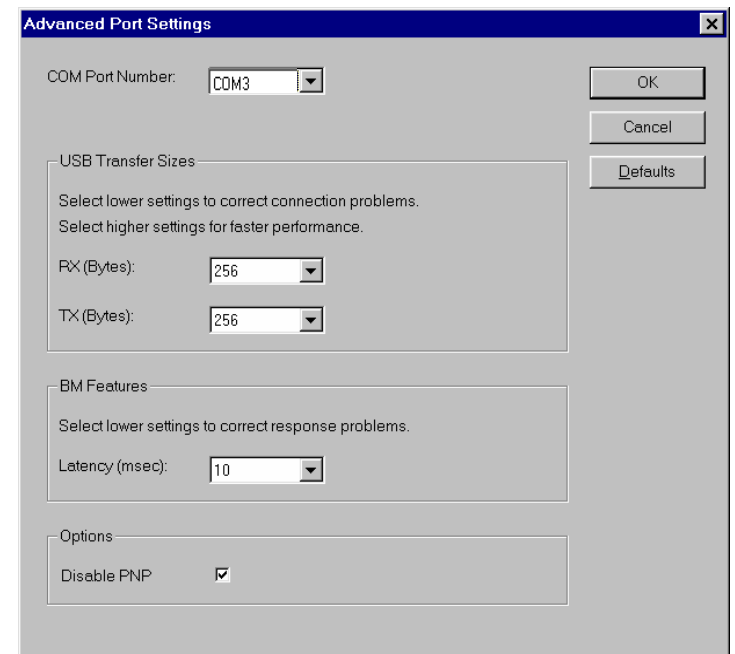
These parameters are set in the Device Manager which can be opened by using a key shortcut which is WIN and PAUSE key. Open the „HARDWARE – Device Manager“ tab and select “View devices by type”. Then by clicking on + next to the Ports row the sub menu Ports will be opened, where at the end the USB serial port is stated:

Select by mouse or keyboard the row (USB serial port) so it is marked and click the right mouse button on the selection PROPERTIES - PORT SETTINGS.

There select the number of the COM port, which

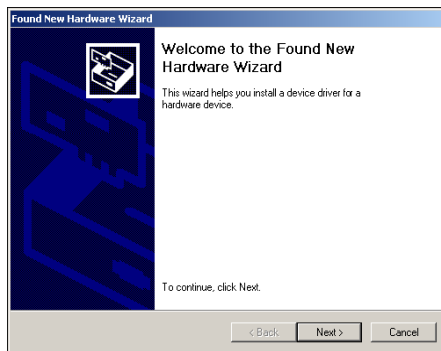


will be used for access to the application (if you chose for example COM3, your software will communicate with the application through port COM3). Then click OK several times and setting of COM port properties will be successfully finished.



HART-modem and Win 2000

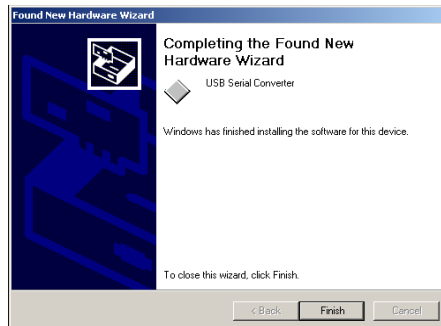
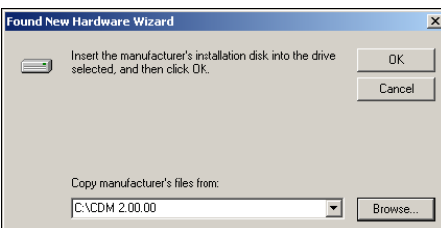
Switch on the computer and then connect PC with HART modem via USB cable. The screen below will appear:



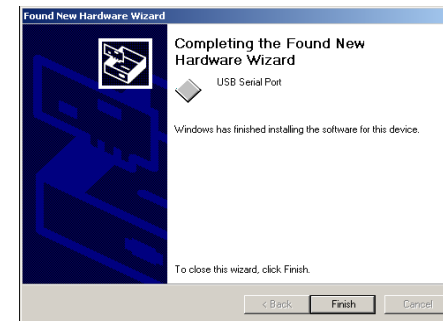
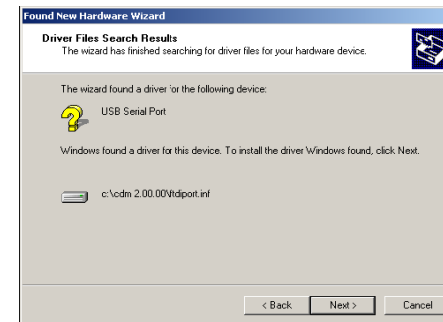
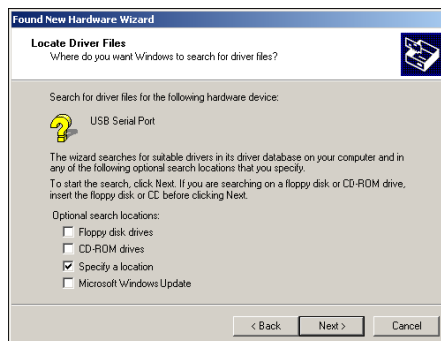
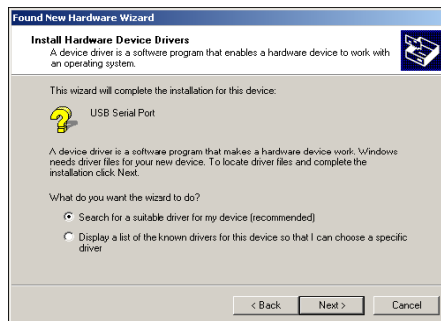
Select „Find proper driver“ from the options available and then click „Next“ to proceed with the installation. Select a directory in which the VCP driver is located (e.g. this computer/C:/CDM2.00.00) and click OK.



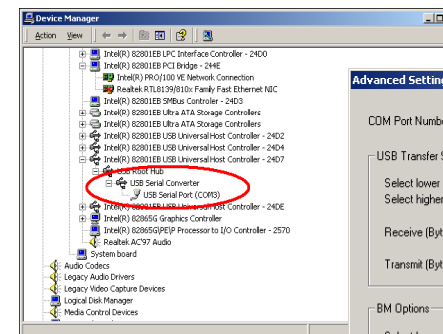
The chosen directory is shown in the dialog box. Then click OK, NEXT and FINISH to complete the installation.



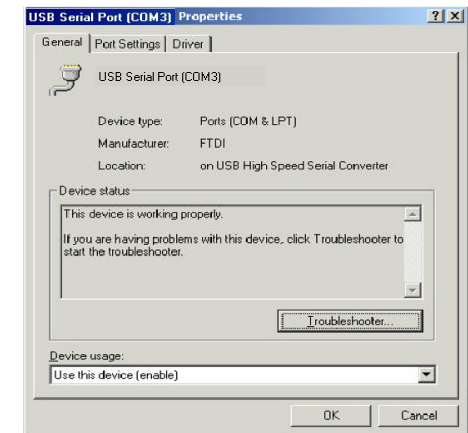
Installation of the converter is finished and in second step the COM-USB port will be installed similarly.



For successful communication of the application following parameters has to be set: number of COM port, transfer rate, control of data flow, parity and number of stop bits. These parameters are set in the Device Manager which can be opened by using a key shortcut which is WIN and PAUSE key. Open the „HARDWARE – Device Manager“



tab and select “View devices by type”. Then by clicking on + next to the Ports row the sub menu Ports will be opened, where at the end the USB serial port is stated.



Select by mouse or keyboard the row (USB serial port) so it is marked and click the right mouse button on the selection PROPERTIES - PORT SETTINGS and ADVANCED.

