DI 220

Data Interface for Micro IV

Operations Manual

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Introduction

For Your Safety

The manual must be read and adhered to by all persons who use, service, maintain and check this product. This detector can do the job designed to do only, if it is used, serviced, maintained and checked according to the instructions given by GfG Instrumentation.

The warranties made by GfG with respect to the product are voided, if the product is not used, serviced, maintained and checked in accordance with GfG's instructions. The above does not alter statements regarding warranties and liabilities in GfG's general conditions of sale and delivery. Repairs must only be done by skilled personnel. Unauthorized modification of the product will result in the exclusion of any liability for possible damage. Make sure that only genuine GfG accessories are used with the product. Repairs require the use of genuine GfG spare parts.

Application and use

The data interface DI 220 serves the configuration and transmission of measured data from the MICRO IV to the PC. The program G220CNF stores the measured data in CSV format. These formats can be read by the common programs such as Microsoft EXCEL® or ACCESS®. In addition a bump test and a calibration can be accomplished manually with the DI 220.

Connections and operational elements

The DI 220 is linked to the PC by means of an USB connector. The DI 220 has a connection for the gas supply and gas outlet. For the configuration, data communication or operation of a Bump test or a calibration the Micro IV with the diffusion opening is put downward into the DI 220. Make certain that the diffusion opening lies over the two gas connectors lying next to each other.

Positioning and putting in operation

Put the docking station on a flat level surface. Make sure that the test gas is drained freely and pressure-free! The test gas has to be supplied with a flow rate of 0.5l/min.
When starting up make sure that the connections for gas inlet, gas outlet and PC connection are performed correctly.

Installation

First the software has to be installed. Put the CD into your CD-drive. In case the Autostart function should not be executed, start the program Setup.exe directly from the CD. For operating systems based on Windows NT you need administrator rights for the installation. After starting the Setup program please follow the instructions on the screen.

USB Installation

Now connect the USB adapter to your PC. Windows recognizes the new hardware and asks for the driver. The driver is in the listing USB_V200 on the CD. Instruct Windows to install the driver from this listing. 2 driver components are installed. The first driver is the USB driver, the second driver the virtual COM-Port. Windows XP releases the message that the driver did not pass the Windows logo examination. This message can be ignored. After the successful installation you can see in the device manager (Start->
System control-> System->Device manager), which COM-Port was reserved for the USB adapter. You need the designation of the COM-Port e.g.: COM4 for the adjustment in the software.

Select G220 Conf

The program started by one double click on the icon "GfG G220cnf". The icon installed under "Start\programs\GfG\ Micro IV". After the program is started the program surface shows up. Before starting the program the data interface must be connected to the PC.

On the right side under the red circle the port for the data interface is selected. Then click on the „Open Port" for opening the port and for starting the connection to the DI 220.
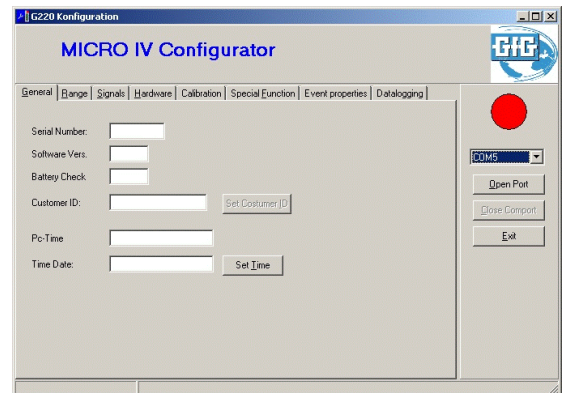
The MICRO IV is put in such a way now into the Slot of the data interface that the diffusion opening lies over the two gas connectors in the data interface. For connection the middle key must be pressed at the MICRO IV. The circle becomes green to indicate that the connection is completed. On the present page in the program the fields are filled with the data by the MICRO IV.

General

Here you see the general data of the detector: Serial number, software version, battery capacity, CustomerID, date and time of the internal clock. This page allows changes only in the CustomerID field. For transferring the change to the detector, click on "Set Customer ID". Click on "Set Time" to transfer the PC time to the MICRO IV. If the time deviation is more than 5 minutes, the time is transferred automatically to the detector.
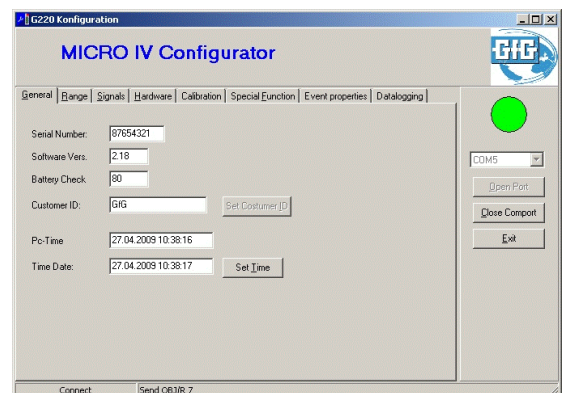
Range

Here you see the detection range of the instrument and the relevant alarm settings. In the field Value the current measurement value is shown. The fields A1 to TWA can be changed, to adjust the alarm values. If a value is set to zero, this threshold is locked and the detector does not trigger an alarm for this value. The individual fields are: A1 = 1st alarm threshold, A2 = 2nd alarm threshold, A3 = 3rd alarm threshold, STEL = short-term exposure level over 15 minutes, TWA = time weighted average over 8 hours.

With the check boxes you can determine whether the alarm is falling below and stored (then an alarm must be reset). With the check box „allowed honk off" you can permit the user to switch the horn off during an active alarm. Please adhere to your local directives.
The field CAL Gas specifies the gas concentration of the calibration gas which is used for adjusting the detector by means of the keypad.

Signals

Here you can adjust the behaviour of the detector. Example: Should you wish the vibrating alarm to remain switched on for longer time, you can select „Moderate" or „Long". Should the vibrator be deactivated during an alarm, select "Off".

For the other operating features you can do similar definitions.

The fields for the Bump or Cal alarm provide controls when the docking station DS 220 is used.

Hardware

This page shows the hardware setting of the detector. It is possible to authorize the user to adjust the detector by means of the keypad, to switch off the vibrator or to lock the keypad in a way that only the battery test is possible. Detectors with firmware versions of at least 2.20 allow to select the safe Min-Max mode. In this mode the user cannot delete the maximum values by means of the keypad. Additionally the detector can be configured to select the best resolution, if the sensor data provide several detection ranges.
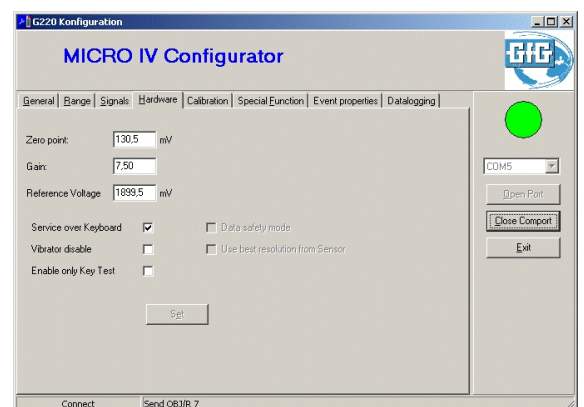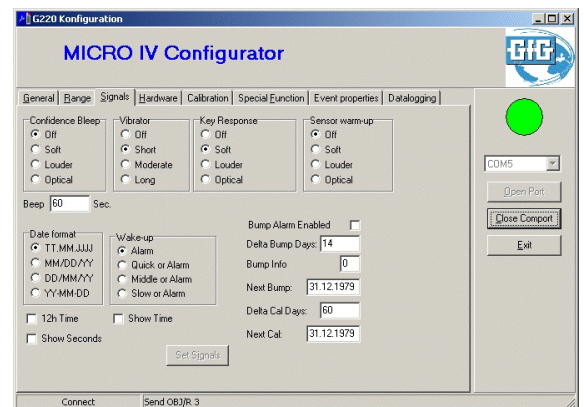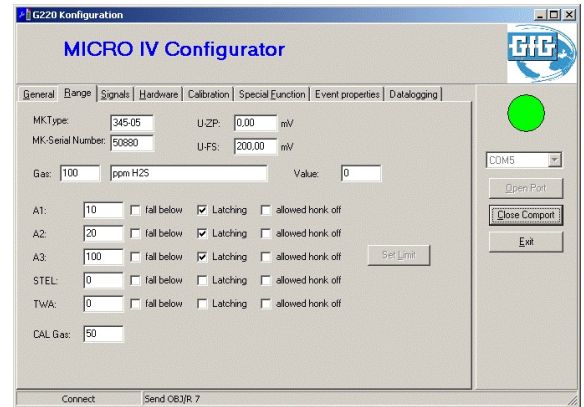
Calibration

The DI 220 allows a quick and easy adjustment of the MI-CRO IV. Air or test gas must be supplied with a flow rate of 0.5l/min ± 0.1l/min.

By clicking on "Start Zero" the zeropoint adjustment is started. For zeropoint adjustment, synthetic air must be used. For adjustment enter the test gas concentration in the field "Gas concentration" and click on "Start Cal". The field "Result" shows whether the procedure was successful or not.

"Horn Check" means a test of the audible signal.
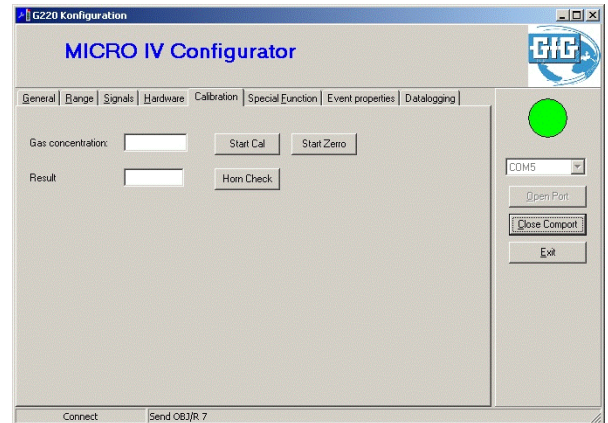
Special function

This page is meant only for service. The detector can be turned off or set back to factory settings. All other functions should only be used after consultation by GfG.
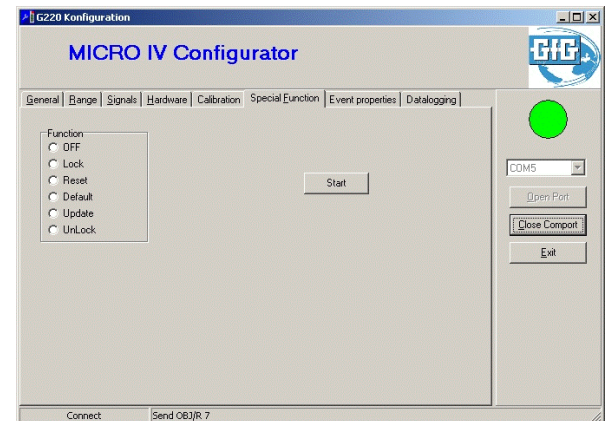
Event properties

Here you can read the event logger of the MICRO IV and store the data as a CSV file on your PC. The event data include the following information:

Date and time, activation or deactivation of alarm, current gas concentration. The left hand fields are for information only. Event data are present, if the field "Event Count" shows a value higher than zero. To transfer event data to the PC, click on "Read". The system asks for a file name. Under this name these data are stored on the PC. In order to import the data to MS-EXCEL, start EXCEL and save the file via drag and drop into EXCEL. To delete the data in the detector push the button "Clear". For a series of measurements the oldest data should be deleted first.
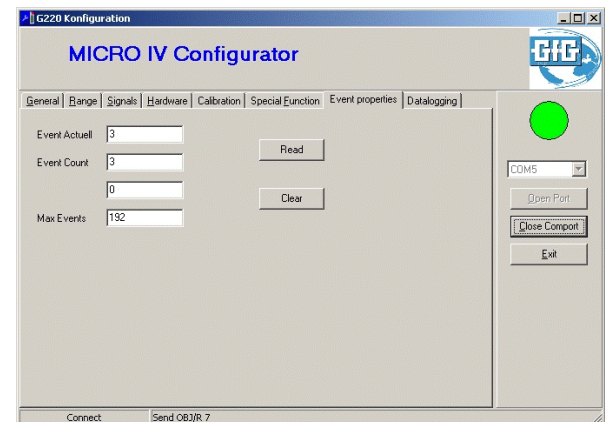
Data logging

Here you can readout the data logger of the MICRO IV and store the data on your PC as CSV file. The data include the following information:

Date and time, current gas concentration.

The left hand fields are for information only. Data are present, if the field "DL Block" shows a value higher than zero. Clicking on "Read" transmits the data from the detector to the PC. The system asks for a file name. Under this name these data are stored on the PC. In order to import the data to MS-EXCEL, start EXCEL and save the file via drag and drop into EXCEL. To delete the data in the detector push the button "Clear". For a series of measurements the oldest data should be deleted first.
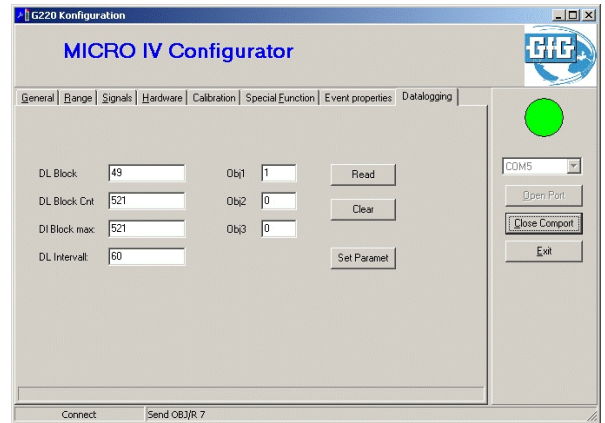
Technical Data

Type:		DI 220 Data Interface
Gas supply:		0.5 lpm
Power supply:		USB
Housing:		
	Material:	ABS
	Dimensions:	4 x 2.4 x 4 inches / 100 x 60 x 100 mm (WxHxD)

GfG Instrumentation, Inc.

1194 Oak Valley Dr.
Suite 20
Ann Arbor, MI 48108
USA

US/Canada:	(800) 959-0329
US/Canada Fax:	(734) 769-1888
International:	+1 734 769 0573
International Fax:	+1 734 769 1888
Website:	www.goodforgas.com

GfG Instrumentation
Worldwide Manufacturer of Gas Detection Solutions