

**Interface converter**

**Installation and operating manual**

**USB 5100**



**CE**



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## 1. Intended use

The adapter contains 2 functions:

- electrically isolated interface converter for the connection of a GMH 5xxx to the USB-interface of your PC.
- electrically isolated instrument power supply for the GMH 5xxx

## 2. General advice

Read through this document attentively and make yourself familiar to the operation of the device before you use it. Keep this document in a ready-to-hand way in order to be able to look up in the case of doubt.

### 3. Safety instructions

This device was designed and tested considering the safety regulations for electronic measuring devices. Faultless operation and reliability in operation of the measuring device can only be assured if the General Safety Measures and the devices specific safety regulation mentioned in this user's manual are considered.

1. Faultless operation and reliability in operation of the measuring device can only be assured if the device is used within the climatic conditions specified in the chapter "Specifications".
2. By faulty handling of the interface converter a damage of the device cannot be excluded. Likewise a damage of your attached device is possible.  
**In such case we cannot assume any warranty.**  
The manufacturer will not assume any warranty for damages to other devices resulting by use of the interface converter.
3. Standard regulations for operation and safety for electrical, light and heavy current equipment have to be observed, with particular attention paid to the national safety regulations.
4. When connecting the device to other devices (e.g. the PC) the interconnection has to be designed most thoroughly, as internal connections in third-party devices (e.g. connection of ground with protective earth) may lead to undesired voltage potentials.
5. The device must be switched off and must be marked against using again, in case of obvious malfunctions of the device which are e.g.:
  - visible damage
  - no pre-scripted working of the device
  - storing the device under inappropriate conditions for longer time

When not sure, the device should be sent to the manufacturer for repairing or servicing.

6. **Attention:** Do not use this product as safety or emergency stopping device or in any other application where failure of the product could result in personal injury or material damage. Failure to comply with these instructions could result in serious injury and material damage.
7. This device must not be used at potentially explosive areas! The usage of this device at potentially explosive areas increases danger of deflagration, explosion or fire due to sparking.
8. This device is not constructed for use in medical applications.

### 4. Disposal notes



The device must not be disposed in the regular domestic waste.  
Send the device directly to us (sufficiently stamped), if it should be disposed.  
We will dispose the device appropriate and environmentally sound.

### 5. Installation

For installation of the device drivers a user account with an administrator-authorisation is required. If you haven't an appropriate authorisation please consult your system administrator.

*If you already have a device installed with the same USB-Chipset the adaptor will be installed automatically, if not the system will request you to install the driver.*

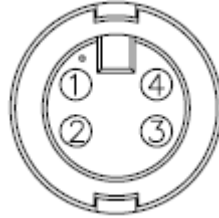
**If the adaptor is correctly installed on your system you have, for application with our software, a new additional COM-Port is available.**

## 6. Specification

### Connection:

<b>PC:</b>	Standard USB-plug connector (type A)
<b>Instrument:</b>	4-pole bayonet connector for direct connection of a GMH 5xxx

### Assignment bayonet connector:



Viewing to socket contact

- 1 : analog output (*of the device*)
- 2: interface
- 3: GND
- 4: power supply

**Interface:** isolated serial interface

**Power supply:** isolated power supply for handheld instrument (~5 V<sub>DC</sub>)  
*(Please note: the power supply are available after successful initialisation of the adaptor by your PC)*

**Power Supply:** via USB-interface

**Operating temperature:** 0 ... +50 °C

**Storage temperature:** -20 ... +70 °C

### Housing:

**Dimensions:** 56 x 31 x 24 mm (L x W x D) (only housing)

**Cable length:** USB approx. 30 cm  
 GMH 5xxx approx. 1 m

**Weight:** approx. 68 g

### Directives / standards:

The instruments confirm to following European Directives:

2014/30/EU EMC Directive  
 2011/65/EU RoHS

Applied harmonized standards:

EN 61326-1 : 2013 emissions level: class B  
 emi immunity according to table 3  
 Additional fault: <1%

EN 50581 : 2012

### 6.1 System requirements:

- 1.0 GHz Dual Core Processor or higher
- Operating system: Windows XP, Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows Server 2003, Windows 2008, Windows 2008 R2,  
*(note: not suitable for Windows RT)*
- Microsoft .NET Framework 4 (*by using the AutoInstaller*)
- free USB port.

## 7. Frequently asked questions (FAQ)

### 7.1 How to check whether the adaptor has been installed correctly and via which COM-port can I approach the installed adaptor?

Start the Device-Manager and open the submenu **“Ports (COM & LPT)”**

If the installation was successful, there will be the entry **“CP210x USB to UART Bridge Controller (COMx)”**, in which the x after the Com indicates the available COM-port (i.e. COM4).

*Note: The adaptor will not be shown in the device manager, if it is not connected to the PC.*

If the entry is occupied by an exclamation mark or the entry is not there, then the driver has not been installed correctly.

### 7.2 How to change the COM-port of the adaptor?

Make sure that the adaptor is connected, start the Device-Manager and open the submenu **“Ports (COM & LPT)”**

If the installation was successful, there will be the entry **“CP210x USB to UART Bridge Controller (COMx)”**, in which the x after the Com indicates the available COM-port (i.e. COM4).

Open the features of this connection by a double-click, go to **“Port Settings”** and then click there the button **“Advanced...”**.

There you can choose the preferred COM-Port at the point **“COM Port Number”**. If this port is already reserved for another (even not connected) device, a error message will appear:

**“In principle it is possible that 2 devices are set on the same COM-port, but then you have to take care, that not both devices are connected at the same time, because this would lead to a conflict!”**

### 7.3 How to find out the used version of the driver?

Make sure that the adaptor is connected and start the Device-Manager.

For the COM-driver open the submenu **“Ports (COM & LPT)”**, open the features for this connection **“CP210x USB to UART Bridge Controller (COMx)”** by double-click and change then to **“Driver”**.

There you can see the currently used driver version.



