

Gas Monitor

User Manual

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1. Introduction

This document describes how to use the software **Gas Monitor**. **Gas Monitor** is an information viewer used to monitor the concentration of gases (CH₄, LPG, CO, gasoline vapors).

2. Installation

Below is the information to install **Gas Monitor** on the operating system

2.1. Minimal system prerequisites

| Component | Requisites |
|------------------------|--|
| Computer and processor | X86 processor |
| Memory | 1GB RAM |
| Hard disk | 10MB of free space |
| Display | Monitor with a resolution from 1024x768 to 1920x1080 |
| Operating System | Microsoft ® Windows ® XP |
| Graphic Board | Graphics hardware acceleration requires a DirectX 9.0c graphics card with 256 MB of video memory or more. |
| Software | Microsoft® .NET Framework version 3.5sp1 or higher. During the installation, close any program such as antivirus or firewall that may be blocking in any way the correct installation of software |

2.2. Software installation

1. The software come as a single .zip file to unpack

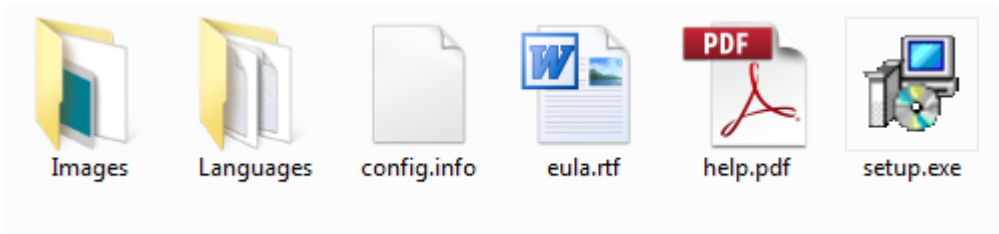


Figure 1

2. The installation will start double clicking on the file **setup.exe** (installer).
3. Choose the installer language (Figure 2)

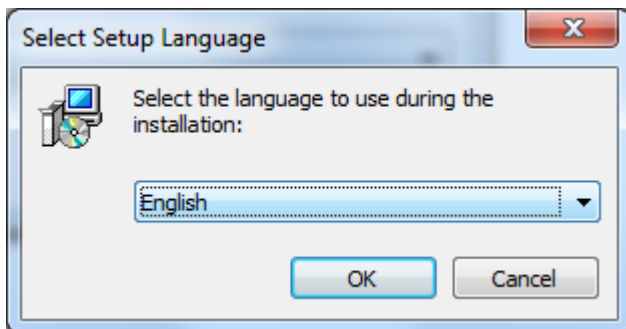


Figure 2

4. If Microsoft® Framework .Net 3.5sp1 is not installed on your system, the installation process won't continue and the user will be warned by a popup window (Figure 3). If you click **OK**, the installer will open a browser window, already addressed to the right link to download and install the .Net 3.5sp1.

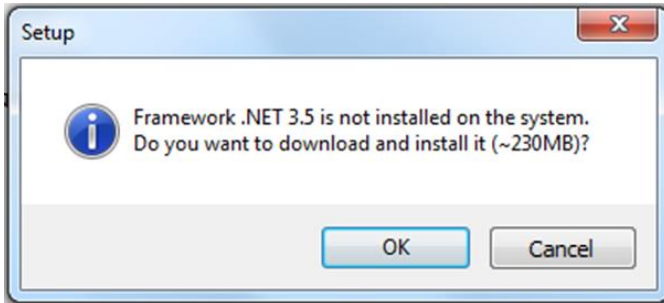


Figure 3

At this point, follow the instructions starting from point 2 of this procedure.

5. When the system will be ready for installation, click on **Next** (Figure 4), then on **Next**, then again on **Next** and finally on **Install**. In the end, it is possible to launch the **Gas Monitor**.

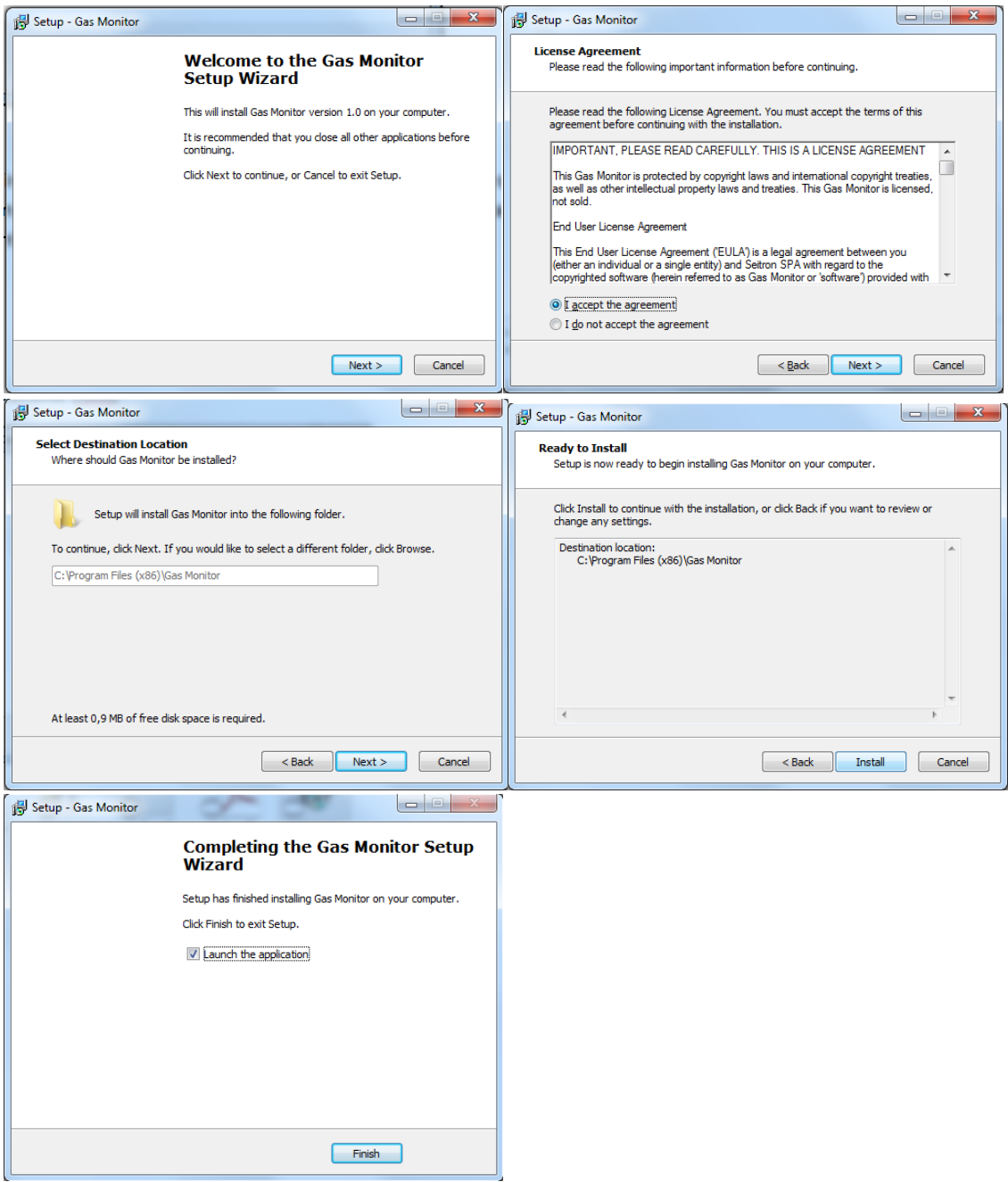


Figure 4

6. Click on **Finish** to end the installation procedure

3. Use of the software

3.1. Prerequisites

The PC, which executes **Gas Monitor**, must obtain data from the monitoring system of the concentration of gases through a RS485-to-USB serial adapter connected to a free USB port.

3.2. Graphical User Interface (GUI)

1. The graphical interface of the software is presented in Figure 5

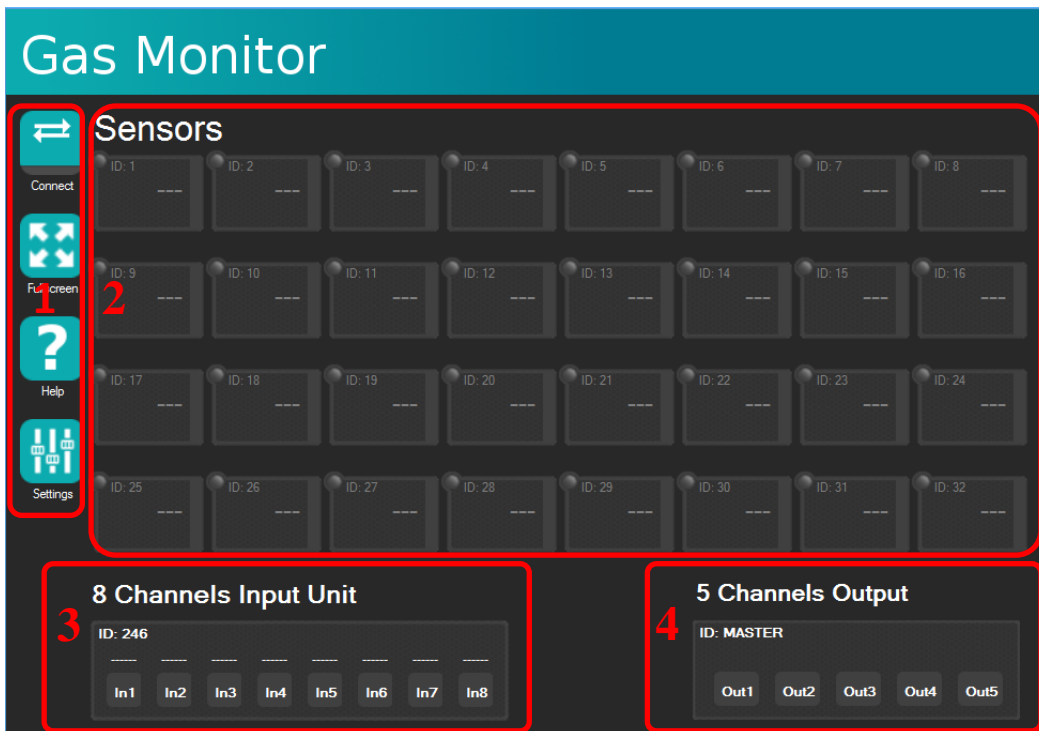







Figure 5

2. In the left corner (1), there is a toolbar with some useful buttons to interact with the application. In particular:

-  Connect/disconnect **Gas Monitor** from the communication bus
-  Normal/fullscreen view mode (you can also click **F11** on the keyboard)
-  View the Help file
-  Software settings

- 3. In the centre (2), there is the sensors current state view
- 4. In the bottom left corner (3), there is the inputs current state view
- 5. In the bottom right corner (4), there is the output s current state view

3.3. First use

1. With regard to the first use of **Gas Monitor**, it is necessary to set some simple settings.
2. Start the software and click on the settings button  located on the toolbar. A dialog will popup.

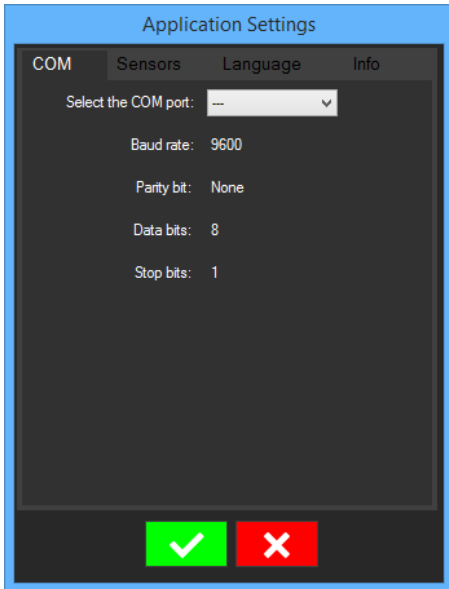


Figure 6

3. Click on the tab **COM** (Figure 6) to select the serial port connected to the monitoring gas concentration system.
4. Click on the tab **Sensors** (Figure 7) to set an optional label for every sensor (12 characters are the maximum allowed length).

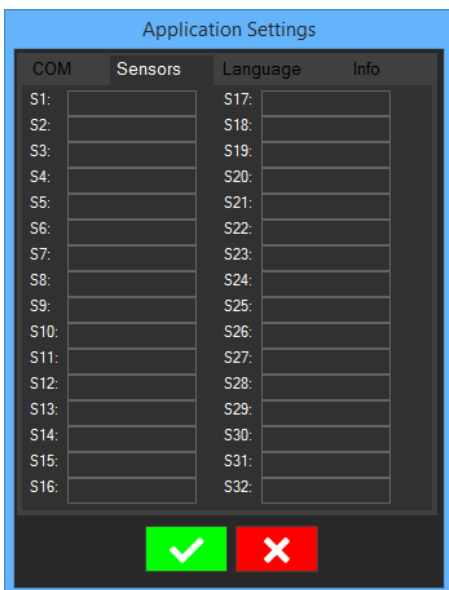


Figure 7

5. Click on the tab **Language** (Figure 8) to select the software language.

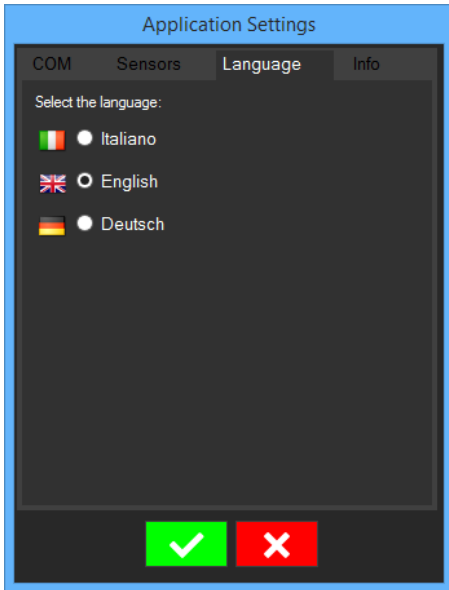





Figure 8

6. Click the button  to save or click the button  to cancel the new settings. The settings dialog will close and the software will apply, or cancel, the new settings.

7. Click on the button  to start the communication. This button could assume the following states:

 : no connection

 : the connection is OK

 : the user has successfully started a connection with the monitoring system, but no data has arrived within a specified time (timeout expired). In this case there could be some communication errors. If the communication is restored, the button will change its status

8. If a connection has been established between the software and the system, the user will see a view like that presented in Figure 9

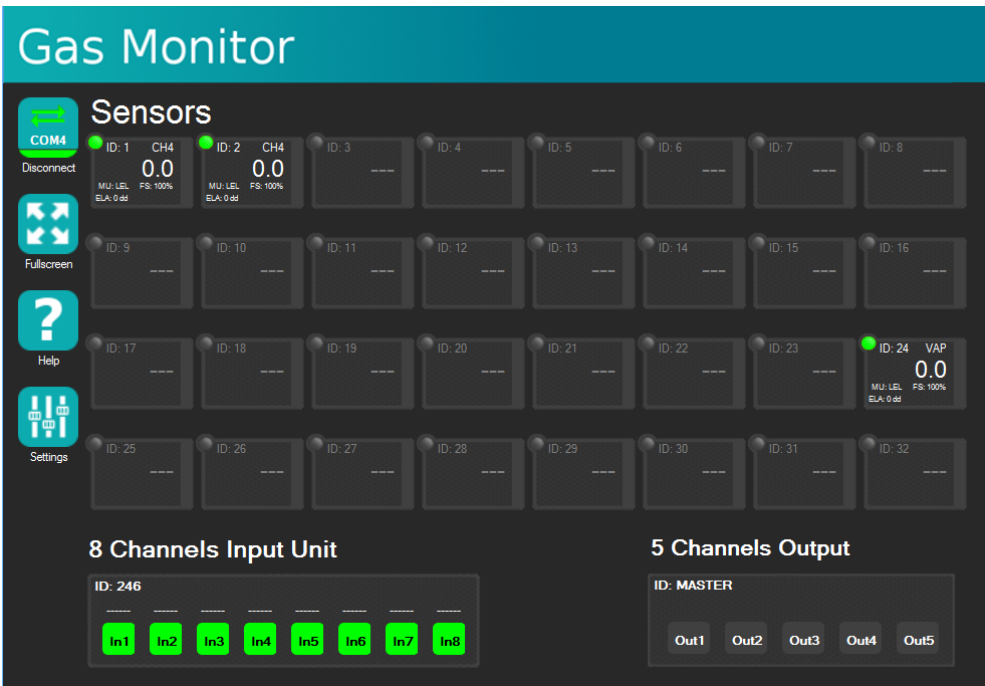


Figure 9

9. Specifically for each sensor (Figure 10):

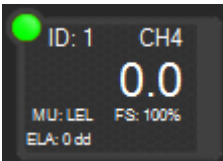









Figure 10


There is a LED status, an ID (ID 1-32), the gas type (CH4), the current gas concentration (0.0), the measure unit (MU), the full scale value (FS 50% or 100%), the number of elapsed days (ELA), a graph bar indicating the current measure over the maximum value representable by the sensor and an optional description chosen in the application settings. The status LED could be:

-  : no sensor detected
-  : the sensor has been detected
-  : pre-alarm status
-  : alarm1 status
-  : alarm2 status
-  (red and blinking): error status


10.Regarding the 8 Channels Input Unit:

: no input detected

: the input has been assigned

: the input has not been assigned or it is in error

11.Regarding the 5 Channels Outputs:

: no active output

: active output

4. Uninstall the software

The software comes with an executable that allows to uninstall it from the system. The uninstall operation is done through the Windows® control panel or via the ***Uninstall*** link on the menu of the application contained in program group **Gas Monitor**.