

Gas Information Software

User Manual

Measurement Overview

Gauge	Fab-No.	Measurement-Start (Date)	Measurement-Start (Time)	Measurement-End (Date)	Measurement-End (Time)	Sensor 1	Unit 1	Sc
EX-TEC PM 4	0601100002	03.12.2002	05:14:04	03.12.2002	06:03:51	CH4	%UEG	
EX-TEC PM 4	0601100002	03.12.2002	09:59:57	03.12.2002	11:22:17	CH4	%UEG	
EX-TEC PM 4	0601100002	03.12.2002	12:28:32	03.12.2002	13:05:00	CH4	%UEG	
EX-TEC PM 4	0601100002	03.12.2002	13:05:13	03.12.2002	13:34:21	CH4	%UEG	
EX-TEC PM 4	0601100002	03.12.2002	13:34:33	03.12.2002	13:38:07	CH4	%UEG	
EX-TEC PM 4	0601100002	12.12.2002	03:42:46	12.12.2002	03:49:24	CH4	%UEG	
EX-TEC PM 4	0601100002	12.12.2002	09:31:26	12.12.2002	09:32:07	CH4	%UEG	
EX-TEC PM 4	0601100002	12.12.2002	10:53:46	12.12.2002	11:06:27	CH4	%UEG	
EX-TEC PM 4	0601100002	13.12.2002	10:29:04	13.12.2002	10:33:38	CH4	%UEG	
EX-TEC PM 4	0601100002	16.12.2002	05:57:46	16.12.2002	07:27:56	CH4	%UEG	
EX-TEC PM 4	0601100002	16.12.2002	07:29:27	16.12.2002	08:39:07	CH4	%UEG	
EX-TEC PM 4	0601100002	10.04.2003	04:38:51	10.04.2003	04:39:22	CH4	%UEG	
EX-TEC PM 4	0601100002	23.04.2003	04:34:29	23.04.2003	04:35:32	CH4	%UEG	


SEWERIN

GB

103969

User Manual

Gas Information Software (GasIS)

**The management and analysis of measurement
data**



103969 – 08.10.2003 – 1.X.X



Note:

This symbol flags information and hints extending beyond the actual operation of the product.

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1 Introduction

The SEWERIN EX-TEC Combi, SR2-L, SR2-DO, SR2-BIO, EX-TEC PM 4, OD 4 and GM 4 gauges continually record measurement values. The Gas Information Software (**GasIS**) enables these stored data to be read out into a PC, where they can be managed, archived, displayed and printed out.

2 Installation

2.1 Installation from CD-ROM

2.1.1 Information on the SEWERIN CD-ROM

In addition to the **GasIS** software the CD-ROM supplied also contains other SEWERIN software products, together with their documentation in the PDF format.

The **GasIS** software must be installed, then released. The serial number required for this is included in the items supplied.

All the other software products can only be installed as demo versions with restricted functions. If you decide to buy one of these products you will be supplied with the serial number required to release it.

2.1.2 Installation steps

To install the **GasIS** software, carry out the following steps:

- Close all Windows programs.
- Insert the SEWERIN CD in your computer's CD-ROM drive. After a short pause the SEWERIN user dialogue appears automatically.

**Note:**

If the SEWERIN user dialogue is not automatically launched on your computer, run the **start.exe** file in Windows Explorer. This can be found in the root folder of the SEWERIN CD-ROM.

- Click on **GasIS – Gas Information Software**.
- Depending on the computer's configuration one of the following two windows can appear:

file download window > Select the option **Run this program from its current location**. Press **OK** to confirm.

Security Warning window > Click on **Yes**.

- An installation assistant gives you step-by-step guidance until installation is complete. Follow its instructions, and configure the software as required.

2.2 Download and installation from the website

The www.sewerin.com website has a **Download** area where the latest version of the **GasIS** software is available for downloading.

Updating existing GasIS software

Compare the number of your installed version (? – **Info**) with that of the version available for downloading. If your number is lower, we recommend updating it.

Initial installation of the GasIS software

In this case the **GasIS** software is only available as a demo version. If you wish to purchase it, please contact the producer (for the address see the back cover) who will provide you with a serial number to release it.

Download procedure

- Click on **GasIS – Gas Information Software – Version X.X.X** in the download area of the website.
Various intermediate steps (e.g. security checks) may be necessary depending on your computer's settings (e.g. browser security settings).
- Download the compressed file **sw_gasis.zip**.
- Unzip the contents of the file into any temporary folder (e.g. **C:\temp**).
- Double-click on the **setup.exe** file to run it. This commences the installation process.
- An installation assistant gives you step-by-step guidance until installation is complete. Follow its instructions, and configure the software as required.

2.3 Releasing the software (entering the serial number and user name)

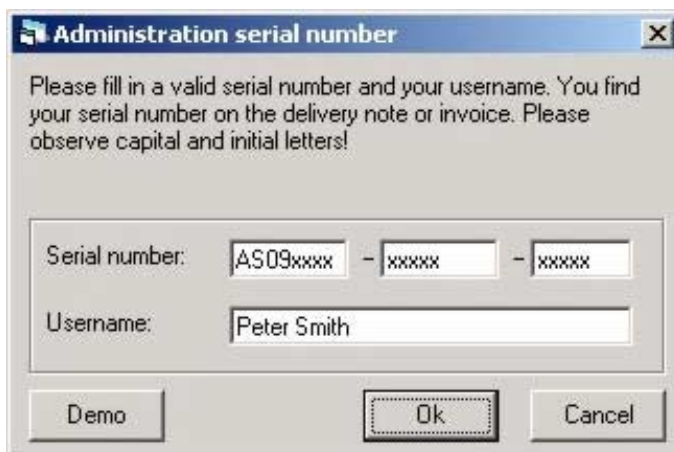
The **GasIS** software is not available for fully functional use until it has been released by entering the serial number, which you receive when purchasing it.



Note:

You can only communicate with SEWERIN gauges when the software has been released. Until it has been released only the demo version with restricted functions is available to you.

Until the software has been released an entry window appears every time it is run.



The image shows a Windows-style dialog box titled "Administration serial number". The dialog contains the following text: "Please fill in a valid serial number and your username. You find your serial number on the delivery note or invoice. Please observe capital and initial letters!". Below the text are two input fields. The first is labeled "Serial number:" and contains the text "A509xxxx - xxxxxx - xxxxxx". The second is labeled "Username:" and contains the text "Peter Smith". At the bottom of the dialog are three buttons: "Demo", "Ok", and "Cancel". The "Ok" button is highlighted with a dashed border.

Fig. 1: Serial number entry

- Enter your serial number and a user name (at least 5 characters). You must observe capital and initial letters when entering the serial number.
- Press **Ok** to confirm. The software is released and all its functions are available to you.

2.4 Uninstalling GasIS

Uninstalling **GasIS** does not erase stored measurement data.

- In the Windows start menu click on **Settings – Control Panel**.
- Click on **Add/Remove Programs**. The **Open Add/Remove Programs** window appears.
- Highlight **GasIS** in the list of installed programs.
- Click on **Remove**.









The operating system erases all **GasIS** software program files and removes the corresponding entries from the Windows registration database. (The installation folder with the measurement can then be deleted manually, e.g. in Windows Explorer.)

3 The toolbar

The **GasIS** software has a toolbar (below the menu bar). The symbols on the toolbar can be used to call the most important software functions direct.



Fig. 2: Toolbar

Symbol	function	description
	Open GasIS-Database	section 4.1.
	Open Archives-Database.....	section 4.2.
	Archiving GasIS-Database	section 4.3.
	Read EX-TEC Combi, SR 2-DO, SR 2-L, SR 2-BIO	section 5.1.1
	Read EX-TEC PM 4, OD 4, GM 4, SNOOPER 4.....	section 5.1.2
	Edit Measurement Place	section 5.3
	Edit User.....	section 5.4
	Close GasIS	section 4.4

4 The Database menu

The **GasIS** software operates internally with Microsoft Access databases (file extension ***.mdb**) to manage all measurement data.

Virtually any quantity of data from various gauges and various periods can be stored in the current database **GasIS.mdb**.

For reasons of coherence you are recommended to archive measurement data from time to time (see section 4.3). This action creates archive databases.

You can switch between the current archive database and any other at any time.



Note:

Measurement data can only be altered or deleted in the current database **GasIS.mdb**, not in archive databases.

4.1 Open GasIS

Every time the program is run the current database **GasIS.mdb** is automatically displayed in the **Measurement Overview** window.

If you have switched to an archive database, you can return to the current database by clicking on **Database – Open GasIS**.

4.2 Open Archives

If you click on **Database – Open Archives**, the **Open Database** window appears for the selection of archived measurement data. The standard path setting is

<Installation folder>\archive.

4.3 Archiving GasIS

The measurement data in the current database **GasIS.mdb** can at any time be written to an archive database. After the archiving process the current database **GasIS.mdb** is empty and can be used for new measurement data read from gauges.

- Click on **Database – Archiving GasIS**. The **Archiving Database** window appears.
- Select the subfolder and file name for the archive database. The program always suggests the file name **Archives of <current date>**.



Note:

You should consider regularly backing up your data. Ideally you should save all archive databases on a server drive that is periodically backed up. Talk to your IT department about setting up a folder for the purpose and giving you access rights.

4.4 Closing GasIS

- Click on **Database – Close** to terminate the program.

5 The Edit menu

5.1 Read Gauge

Before measurement data can be managed with the **GasIS** software they must first be read out from the gauges in which they are stored to the PC. This requires the gauges to be connected to the PC.

For read-out purposes the gauges fall into two groups:

- **EX-TEC Combi, SR 2-DO, SR 2-L, SR 2-BIO**
- **EX-TEC PM 4, OD 4, GM 4, SNOOPER 4**

Reading out data from a connected gauge does not erase them from the gauge's memory. Gauge memory is naturally limited, so the oldest data are always automatically replaced (ring memory). You should select your memory cycles so that no data are lost.

**Note:**

Data-memory settings in the gauges and the deletion of data have nothing to do with this software – they are entirely local to the gauges themselves. Detailed information can be found in the gauge operating manuals.

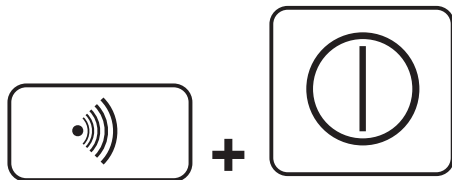
5.1.1 Read-out from the EX-TEC Combi, SR 2-DO, SR 2-L, SR 2-BIO

**Note:**

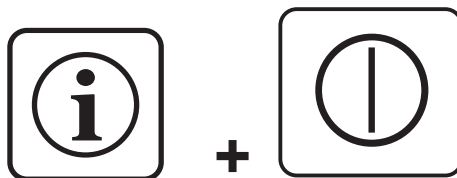
Only one gauge at a time can be connected and read out.

Preparations

- Connect the gauge to the PC. For further information see section 6.2.
- Switch the gauge on as follows:



Key combination for EX-TEC Combi, SR 2-DO, SR 2-L




Key combination for SR 2-BIO

GasIS appears in the gauge display. The gauge is now ready to communicate with the software.

Measurement-data read-out



- In the software click on the button . The data stored in the gauge are read out into the **GasIS.mdb** database. During communication **TXD** is shown in the gauge display.

5.1.2 Read-out from the EX-TEC PM 4, OD 4, GM 4, SNOOPER 4

The EX-TEC PM 4, OD 4, GM 4, SNOOPER 4 gauges have a bus interface, to which **several gauges can be connected at once**.

Preparations

- Connect the gauges to the PC. For further information see section 6.2.
- The **gauges** must be in **charging mode** for read-out.

Measurement-data read-out


- In the software click on the button . The **Overview: Available gauges** window appears.



Fig. 3: Connected gauges – gauge list closed

- All connected gauges are available for selection in the **Equipment list** drop-down menu. The top entry is always **not any**.



Fig. 4: Connected gauges – gauge list open

- Select the gauge whose data memory you wish to read out by clicking on its production number.



Fig. 5: Connected gauges – gauge selected

- Click on the button **Start: Reading Gauge** to start data transfer.



Note:

The entire data memory is always read out in every read-out process. Depending on the data quantity the process may thus take some time.

The **GasIS** software automatically checks whether a measurement has been read out previously. If it has, it is not placed in the database for a second time. (So although all the data are read out, they are not necessarily all placed in the database.)

5.2 Database view – structure of tables and graphic

The **Measurement Overview** shows all the measurement series contained in the selected database. The name of the selected database is displayed in the heading.

Measuremer No.	Measuremer Name	Gauge	Fab-No.	Measuremer (Date)	Measuremer (Time)	Measuremer (Date)	Measuremer (Time)	Sensor	Unit1	S
	Trasse 1	EX-TEC Comb	0450100017	21.01.2003	13:06:00	21.01.2003	13:09:12	CH4	Vol%	
	Trasse 2	EX-TEC Comb	0450100017	21.01.2003	15:15:00	21.01.2003	15:16:30	CH4	Vol%	

Fig. 6: EX-TEC Combi measurement overview with sample data

In fig. 6 the **Measurement Overview** shows the database **Example_Combi.mdb**.

Each line in the table contains one data record. A data record is equivalent to one gauge measurement cycle (from switch-on to switch-off).

The example contains two data records of an EX-TEC Combi with the serial number 045 01 00017. The gauge was switched on and off twice on 21.01.2003.

The data in the **Measurement Name** (e.g. location) and **Name** (e.g. gauge operator) columns are entered using the **GasIS** software. All the rest of the data are derived from the gauge itself and cannot be changed.



Note:

Measurement data can only be altered or deleted in the current database **GasIS.mdb**, not in archive databases.

Measurement No. at the gauges OD 4, GM 4

Only the first measurement place (**Measurement No.**) of a data record is displayed. All other measurement Nos. can be seen from the **Measurement Overview** (fig. 6) at **Show measurements – Show events**.

5.2.1 Sorting data records

Data records can be sorted by various parameters by clicking on the button **Measurement Name**, **Fab.-No.** or **Date**.

5.2.2 Displaying measurement values

Each data record consists of several measurement values. The number of measurement values and parameters belonging to a data record (e.g. sensor type) may vary widely.

- Highlight a data record.
- Click on the button **Show measurements**.
The **Measurement values** window appears. The measurement values are listed in a table.

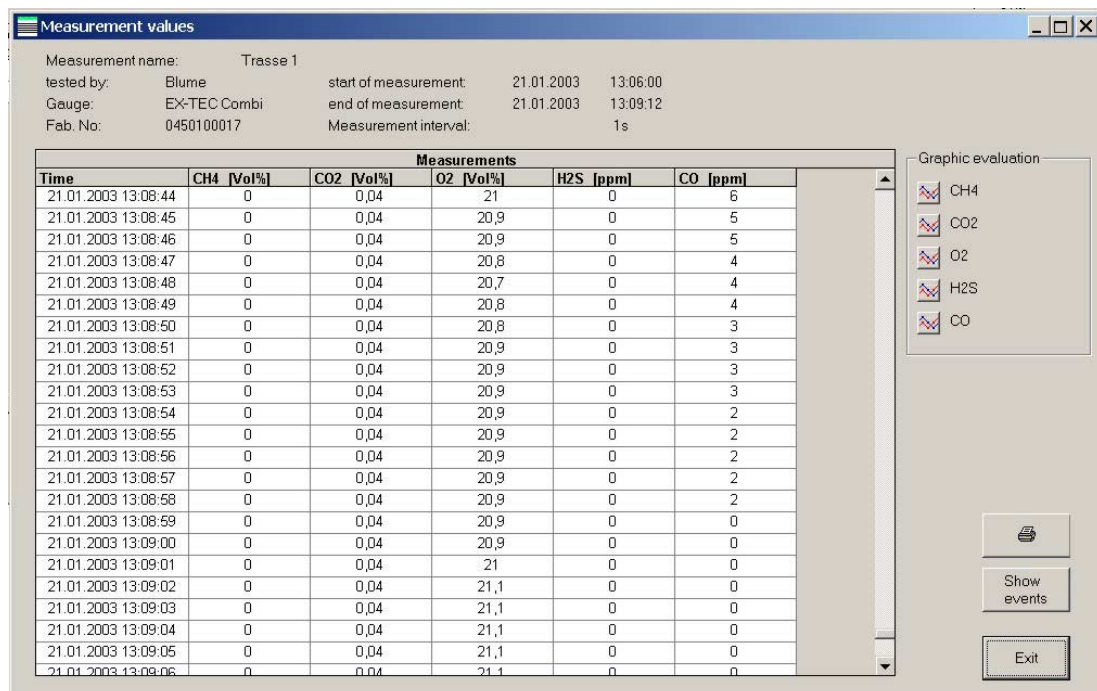


Fig. 7: Measurement values for a selected data record

Graphic representation

Measurement values for individual sensors can be graphically represented and printed out.

- In the **Graphic evaluation** field click on the symbol of the required sensor.

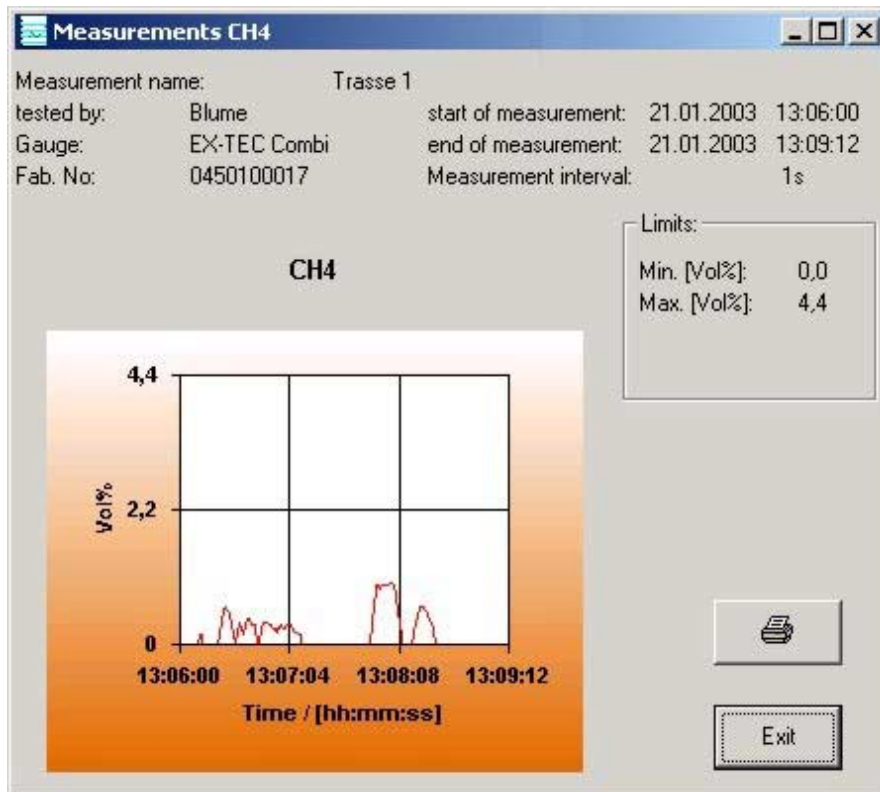


Fig. 8: Graphic representation of methane measurement values

Displaying events

- Click on the button **Show events** to see a tabular representation of all events (alarms, pump defects etc).

Measurement name: Trasse 1
 tested by: Blume start of measurement: 21.01.2003 13:06:00
 Gauge: EX-TEC Combi end of measurement: 21.01.2003 13:09:12
 Fab. No: 0450100017 Measurement interval: 1s

Report	Condition	Value	Event-Date	Event-Time
CO2: Min.-Value	-	0,04	21.01.2003	13:06:00
O2: Max.-Value	-	21,1	21.01.2003	13:06:00
H2S: Min.-Value	-	0	21.01.2003	13:06:00
CO: Min.-Value	-	0	21.01.2003	13:06:00
CH4 (WT): Min.-Value	-	0	21.01.2003	13:06:14
CH4 (WT): Max.-Value	-	0,95	21.01.2003	13:07:58
H2S: Alarm1	On	11	21.01.2003	13:08:00
CO2: Alarm1	On	0,5	21.01.2003	13:08:01
H2S: Max.-Value	-	15	21.01.2003	13:08:05
CO2: Max.-Value	-	0,74	21.01.2003	13:08:06
CO: Alarm1	On	33	21.01.2003	13:08:07
CO: Max.-Value	-	33	21.01.2003	13:08:07
H2S: Alarm1	Off	9	21.01.2003	13:08:10
CO: Alarm1	Off	29	21.01.2003	13:08:11
CO2: Alarm1	Off	0,46	21.01.2003	13:08:11
O2: Min.-Value	-	20,7	21.01.2003	13:08:48
Pump-Error	On	540	21.01.2003	13:08:56
Pump-Error	Off	963	21.01.2003	13:09:01
CO2: STEV-Value	Off	0,03	21.01.2003	13:09:12
CO2: TWA-Value	Off	0	21.01.2003	13:09:12
H2S: STEV-Value	Off	1	21.01.2003	13:09:12

Sort...

Report

Event-Time

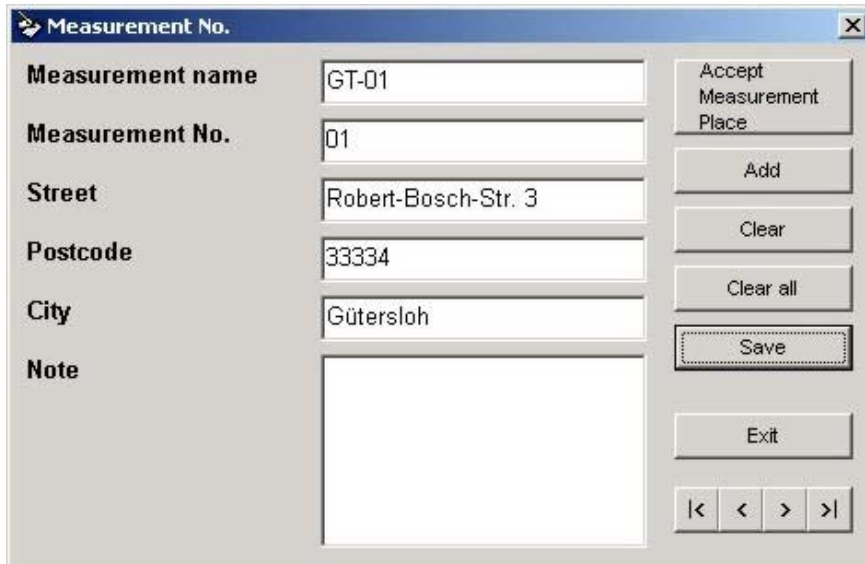
Print

Exit

Fig. 9: Table of events

5.3 Measurement place

There is no limit to the number of measurement places that can be entered. Each measurement can be assigned to a measurement place.

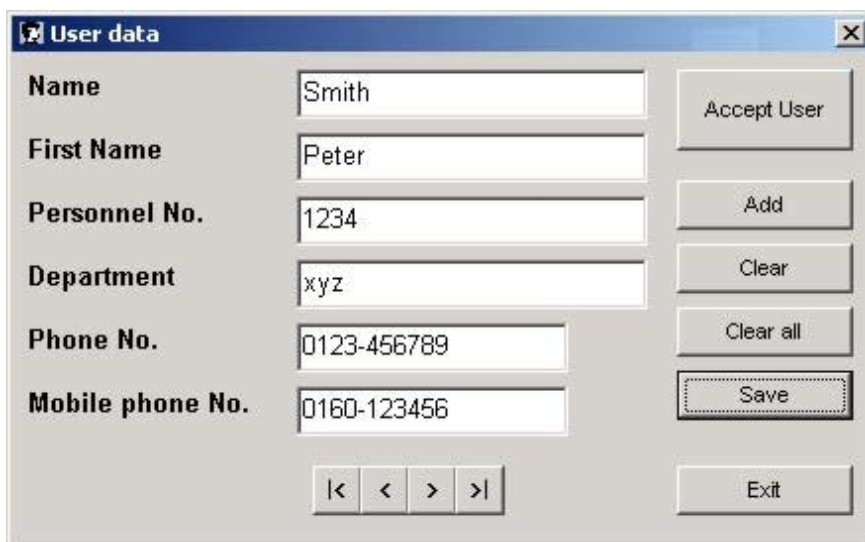


Measurement name	GT-01	Accept Measurement Place
Measurement No.	01	Add
Street	Robert-Bosch-Str. 3	Clear
Postcode	33334	Clear all
City	Gütersloh	Save
Note		Exit
		< < > >

Fig. 10: Enter or edit measurement place

5.4 User

There is no limit to the number of users that can be entered with their personal data. Each measurement can be assigned to a user.



Name	Smith	Accept User
First Name	Peter	Add
Personnel No.	1234	Clear
Department	xyz	Clear all
Phone No.	0123-456789	Save
Mobile phone No.	0160-123456	Exit
		< < > >

Fig. 11: Enter or edit user

6 The Setting menu

6.1 Work folder

The current database **GasIS.mdb** and all archive databases are filed in the work folder.

To facilitate effective, simple data back-up it makes sense to set up a work folder on a server drive, on which all archive databases can be periodically backed up.

- Talk to your IT department about setting up a folder for the purpose and giving you access rights.
- Set up access to the work folder for the **GasIS** software, then click on **Setting – Work Folder**.
- Select the required folder and press **Ok** to confirm the selection. The current database **GasIS.mdb** is immediately copied into the folder.

As soon as you archive, the archive databases are also filed in the selected folder. (Archive databases created before the selection of the new work folder are not automatically copied.)

6.2 COM port

Data exchange between SEWERIN gauges and your PC takes place via a serial interface (COM port).

6.2.1 Connecting gauges

Some SEWERIN gauges can only be connected to an RS232 interface (COM port) of your PC **one at a time**, while others permit **multiple connections**.

- one at a time: EX-TEC Combi, SR 2-DO, SR 2-L, SR 2-BIO
- several at once: EX-TEC PM 4, OD 4, GM 4, SNOOPER 4



Fig. 12: Standard PC with two COM ports (COM1 and COM2)

Most PCs have two COM ports.

A connection cable is required to connect the gauges to the PC and enable them to communicate.



Fig. 13: EX-TEC Combi with 9-pole D-SUB-cable (produced up to the end of 2002)



Fig. 14: SR 2-DO with communication cable (produced from 2003)

EX-TEC PM 4, OD 4, GM 4, SNOOPER 4 gauges

Up to 50 of these gauges can be connected to the interface at the same time. A charger unit is required for each gauge. At least one of them must be the **HG4 charger unit with interface** (order no. LP10-10101). The charger units are cascaded (fig. 15). A connection cable is required for data transfer. This is connected to the COM port of the PC (fig. 16).



Fig. 15: Charger-unit cascade



Fig. 16: Two cascaded charger units with a connection cable to the PC

6.2.2 Selecting the interface

- Click on **Setting – COM-Port** to select the interface (COM port) to which you have connected the gauge(s).

6.3 Language

The **GasIS** software supports several languages.

- Click on **Setting – Language** to select the required language.

7 The Window menu

There are various ways in which several windows can be displayed at once (if more than one is open, that is).

This does not apply to the measurement overview with the database, as generally only one database can be open (either the current database GasIS.mdb or an archive database).

A second window is only opened if you have selected a data record in the measurement overview and click on the button **Show measurements**. You can now select a suitable display option from the menu.

The windows currently open are listed in the lower section of the menu **Window**. Click on an entry to go straight to that window.

8 The Help/Info menu (?)

8.1 Help

The User Manual is available as a PDF file under ? – Help. This enables you to investigate the various program functions on screen.

The Adobe Acrobat Reader is required to open the User Manual in Help. If this is not installed on your PC, you can either install it from the SEWERIN CD or download it from the internet (www.adobe.de). The latest version of the program is always available from Adobe.

8.2 Info

? – Info opens a window with the most important information about the **GasIS** software (e.g. version number).



Fig. 17: Info-window

9 Service and Support

Please do not hesitate to contact us if you encounter any problems with use, wish to ask more detailed questions or have suggestions for changes and improvements. Our address is on the back cover.

We recommend you to visit our website www.sewerin.com every so often to see if there is a new update of the GasIS software.

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