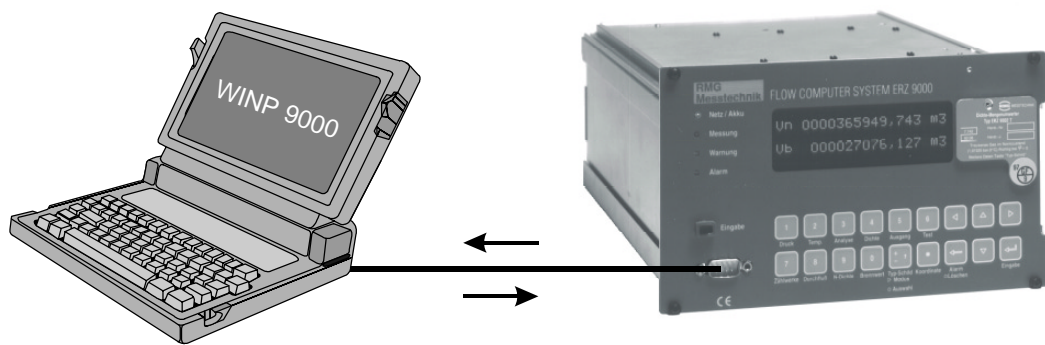


Readout / Parameterization Program WinP 9000

Operating Instructions



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Serving the Gas Industry –
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Introduction

Program Description

Using the WinP9000 program, you can read out all data from an RMG volume corrector or analytical computer without enabling the calibration switch. It is possible to read out either the complete data matrix or only a freely selectable portion of the data.

Even write access is possible (parameterization), but for this purpose the calibration switch has to be enabled. Display values (e.g. measured values) cannot be overwritten.

After you have read out data, the matrix is displayed in the Data window where it can be edited. First, make your changes locally on your PC. Then transmit the new values to the volume corrector using the "write" command.

Furthermore, you can store data or print them out in the form of a data book.

The device types for which you can use the WinP9000 program are listed in Chapter Licenses / Warranty.

System Requirements

In order for WinP9000 to operate correctly and achieve a satisfactory working speed, the PC or laptop computer must satisfy the following minimum requirements:

Operating system:	Windows 95, 98, 2000, ME or NT
Processor:	Pentium 133
RAM:	16 megabytes
Drive:	CD-ROM drive
Free hard disk space:	4 megabytes
Communications port:	RS 232 (serial)

Licenses / Warranty

RMG, the Licensor, allows you, the Licensee, to use the WinP9000 program under the terms agreed when buying the program. The WinP9000 program installed on an IBM compatible computer in Microsoft Windows operating environment enables communication with one of the following devices:

- Gas volume corrector ERZ 9004
- Flow computer series ERZ 9000 series
- Gas volume corrector EC 994
- Analytical computer GC 9000
- Bus coupler: all variants

The CSM 3 versions and the ERZ 9114 T/KE orifice plate computers which are derived from them are not supported.

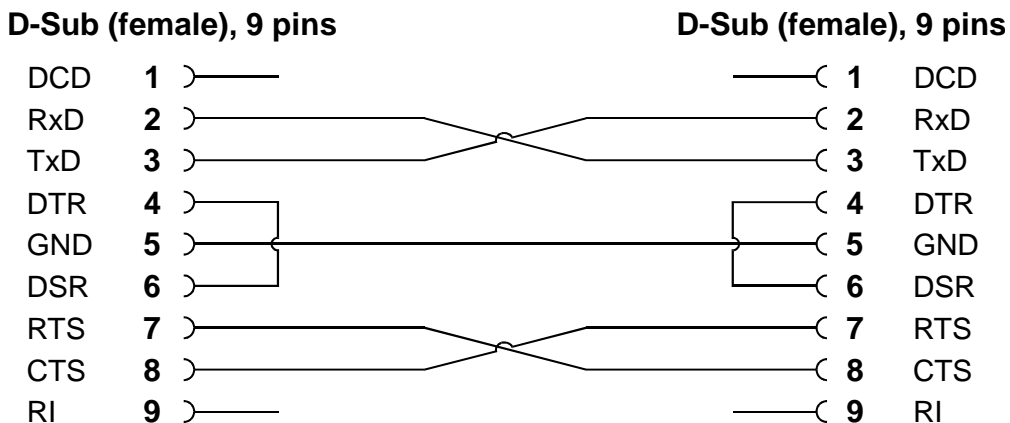
The documentation provided explains the use and structure of the WinP9000 program.

RMG warrants to the Licensee that the original CD-ROM is free from defects. Should a defect occur in a CD-ROM, the CD-ROM may be returned to RMG, who will replace it without charge.

Since the current software is installed on the occasion of every subsequent volume corrector proving, older software versions are not implemented. Should you have any problems, please contact RMG.

Connecting Cable

A null modem cable with the following terminal assignments is required:



Installation

Installing the Program

Insert the CD-ROM in the CD-ROM drive and start installation as follows:

1. Exit all Windows programs.
2. Click the Start button.
3. Then click Run.
4. In the command line box, type the following text:
[Drive:]P9000\setup (e.g. D:P9000\setup)
5. Click OK.
6. Follow the instructions of the installation program.

You can freely choose the base directory for installation. If this directory does not exist, it will be created by the installation program.

A program group will be created which will include the  icon.

If you drag this icon to your desktop, you can start the program by a simple mouse click.

Setting the Communications Port Parameters

First set the following parameters for the front port on the volume corrector or analytical computer:

Parameter	Setting	Coordinates		
		ERZ 9000 T EC 994	ERZ 9004	GC 9000
D-mod1	On	S 2	S 17	-
D-mod2	Data	S 3	-	-
Baud rate	9600	S 4	S 27	J 2
Data bit	8	-	-	J 3
Parity	None	-	-	J 4

Where no coordinate is indicated, the correct values have already been set.

On the PC, you can use either the COM1 or COM2 port. To set the communications port parameters, you must proceed as follows:

1. Click the Start button.
2. Choose "Settings / Control Panel".
3. Then change the communications port parameters through "Ports" or "System" depending on the operating system used. Make the following settings:

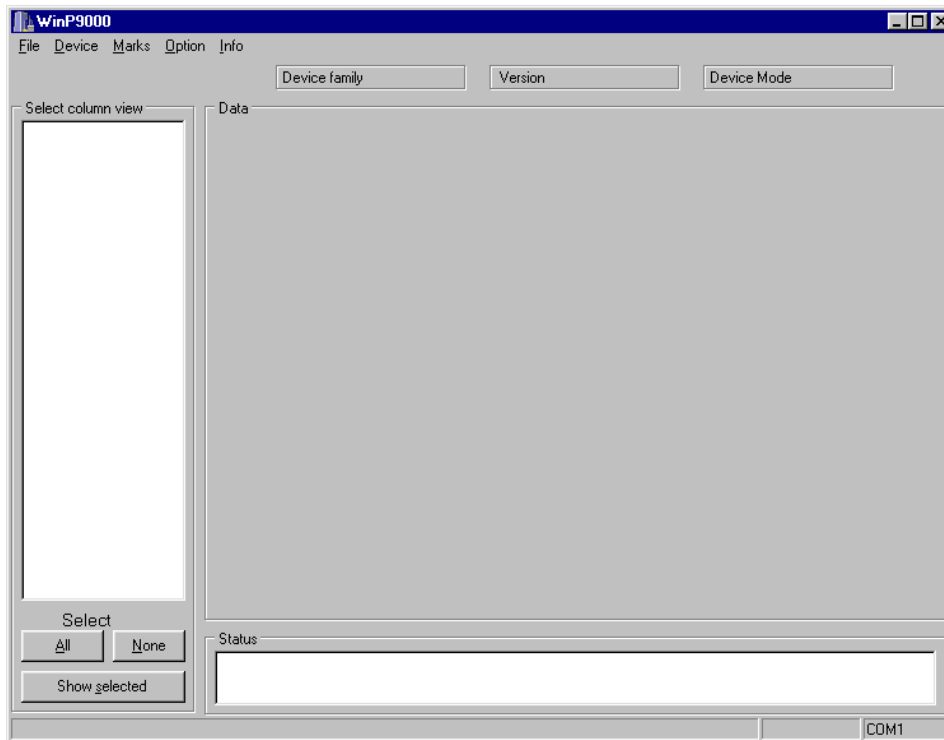
Bits per second:	9600
Data bits:	8
Parity:	None
Stop bits:	1

Finally, select the correct communications port in the WinP9000 program. To do this, start the program and choose either the COM1 or COM2 port on the "Options" menu. Make sure that the same port is chosen on the Control Panel and in WinP9000. Otherwise, the program may crash and WinP9000 will no longer react and have to be terminated through the Task Manager of the operating system.

Operation

User Interface

After you have started the program, the following user interface will appear with windows which are still blank:



To work with the program, you must first establish a connection to the volume corrector or read in a file. Then a copy of the coordinate system of the appropriate device will appear in the “Data” window.

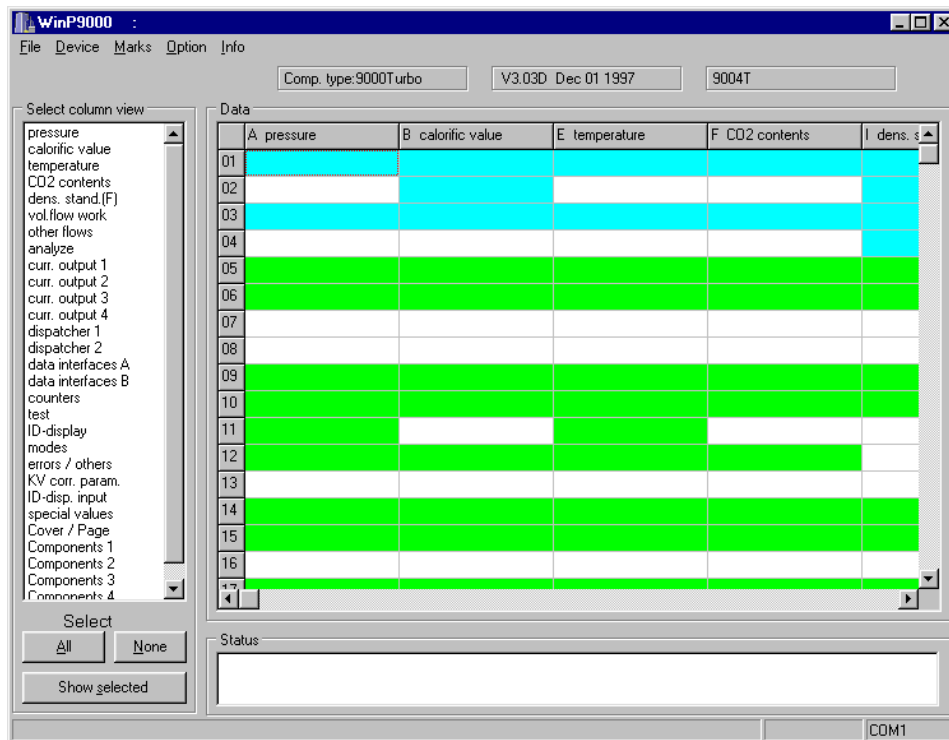
To the left of this window, an overview of the columns of the coordinate system will be displayed in the “Select / View Columns” window. Here you can select the columns to be displayed.

In three fields located above the data, the computer type (e.g. 9000T), the software version (e.g. V 3.08 20.02.01) and the computer mode (e.g. 9004T) are shown.

Below the Data window, there is a status window where status messages are displayed or where the designation of the data element in the currently selected data field appears if a connection to a device has been established.

Establishing a Connection

Choose “Device / Connect” (or press the F5 key) to establish a connection to the volume corrector or analytical computer. During this process, WinP9000 will start to check the connected device for features and compare these with the data stored. You can see this in the status messages which will start with “CFG-Test”. If WinP9000 does not recognize a familiar device, a neutral device will be loaded. As soon as the connection has been established, the user interface will show as follows:



The complete coordinate system of the connected device will be displayed in colour, although without entries at that time. The colours can be changed at will. In the basic setting, headings appear in light yellow, display values (neither of them can be edited) in light blue, whereas the calibration and user data which can be edited are shown in green. White fields are not occupied.

If WinP9000 does not find a familiar device, the two columns “A” and “B” are shown for a neutral device. In such a case, please check the communications port parameters and the connecting cable (including its terminal assignments). If no connection can be established although the parameters are correct, it is likely that either no standard software or an old software version has been installed in the connected device.

If you do not want the whole coordinate system to be displayed, you can select the columns to be displayed in the “Select / View Columns” window. Simply mark the appropriate columns (if you want to mark several columns which are not successive, you must additionally press the Ctrl key) and then click “Show Selected”. It is also possible to mark “None” or “All” columns.

Although the data fields can already be edited at this moment, you should first read in data from the device or a file (make sure that the device type is correct!) in order to increase the ease of operation and avoid errors.

Reading In Data

If you want to read data from the device, you must first mark the appropriate data fields:

- To mark individual fields, right-click the field.
- To mark whole columns, click the column heading.
- To mark whole lines, click the line number.
- To mark the whole coordinate system, choose “Marks / Mark All” from the menu or use the key combination Ctrl+A.

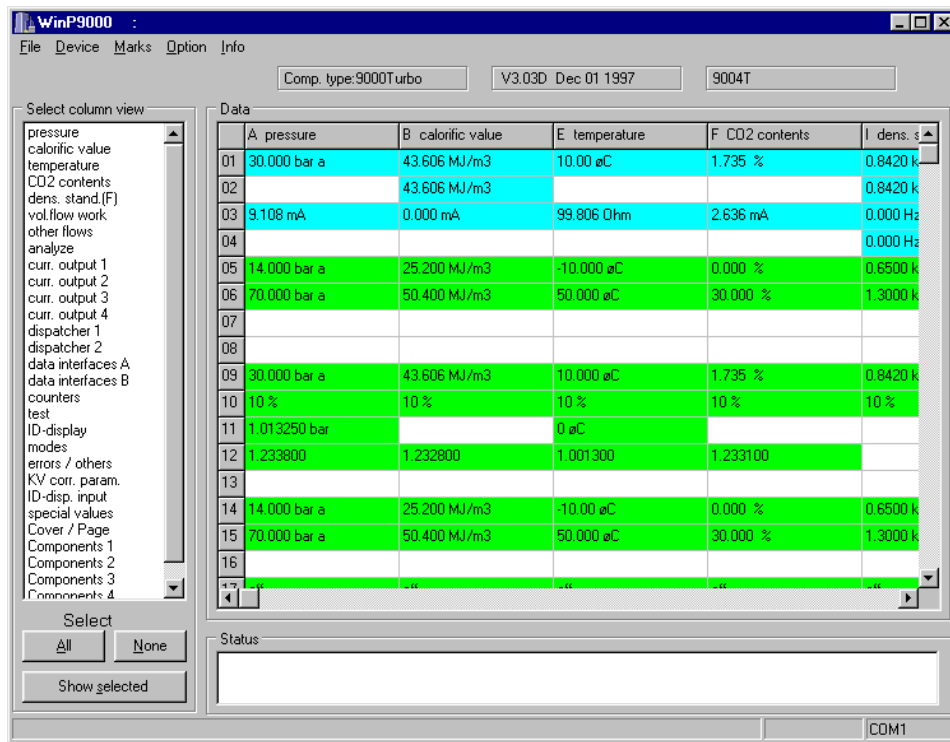
In the basic setting, the fields are displayed in grey. If you want to delete a mark, click the appropriate fields, headings or line numbers again. To delete all marked fields, choose “Marks / Delete All Marked” or press the F9 key.

Then you can start to read out data from the device by choosing “Device / Read” or pressing the F6 key. To cancel this operation, choose “Device / Cancel” or press the F8 key.

Important: After you have performed the “Device / Read” menu function, you must not fail to check that all data fields have been read. If the connected device was occupied at the time of reading data, the data field to be read out at that moment will not be read. These fields will remain marked and must be read out again.

After you have read out the data successfully, they are displayed together with their physical units in the data fields which have been previously marked. If you left-click a data field, a short description will appear in the status window just like in the operating manual of the volume corrector or analytical computer.

After the data have been read in, the Data window will look like this:



In the above figure, data field A09 – Default value (replacement value if a fault occurs) – has been clicked.

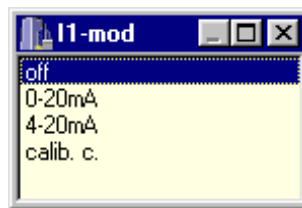
Data fields where an error occurred during transmission will be identified in colour (basic setting: red) and their marks will be deleted.

After the data columns, there are also the “Cover Sheet” and “Contents” 1 to 4 columns. Here you can make entries which will be printed together with the data fields in the form of a data book.

Editing Data Fields

You can easily change calibration and user data. To do this, click the desired data field with the left mouse button twice (no double-click!). The colour of the background will turn white and now you can enter a new numeric value. Then the colour of the field will change (basic setting: yellow).

If no numeric parameter but mode settings are concerned where more than one option is available for selection, a little selection window will open after you have clicked the data field twice.



Now double-click to select the desired mode. The selection window will close again and the new mode will be accepted.

Writing Data

First load the data to be transmitted from a file or the connected device by choosing "File / Open" and edit them as required. First all changes are performed locally on the PC, i.e. the data of the connected device will remain unchanged. Then the changed data must be written or transmitted to the device by means of a menu command. **To do this, it is necessary that the calibration switch has been enabled;** this also applies if user data are to be transmitted!

To write, mark the data fields which are to be written in the same way as you have marked them for reading. Choose the menu command "Device / Write" or press the F7 key to start the write process and choose "Device / Cancel" or press the F8 key to cancel this operation.

If an error occurs during writing, the appropriate data field will be identified in colour (basic setting: red) if it is not marked.

Overview of the Menu Commands

<u>F</u>ile		
<u>N</u>ew	F1	All data fields will be deleted, but the coordinate system will be retained.
<u>O</u>pen	F2	Read in a file from a data medium (reference data or data which have already been read).
<u>S</u>ave	F3	Save data with the same name on a data medium.
S<u>a</u>ve As	Ctrl+F3	Save data with a new name on a data medium.
<u>P</u>rint	Ctrl+D	Print the data book.
P<u>r</u>ev<u>i</u>ew		Show a preview of the data book. (Minor deviations may occur in the preview due to different character sets.)
<u>E</u>xit	Alt+F4	Exit the program.

<u>D</u>evice		
<u>C</u>onnect	F5	Recognize a device automatically. With this command, WinP9000 starts to check the connected device for features to find out which device is concerned and which software version is used.
<u>R</u>ead	F6	Read out marked data from the device and display them.
<u>W</u>rite	F7	Transmit marked data to the device.
<u>C</u>ancel	F8	Cancel connect, read or write.

<u>M</u>arks		
<u>M</u>ark All	Ctrl+A	Mark all data fields excluding the last 5 columns (data book).
<u>D</u>elete All Marked	F9	Delete all marks.
<u>O</u>ptions		
<u>S</u>how Column List	F10	Show or hide the column list.
<u>C</u>olor Settings		Representation of the table fields in colour. You can customize the colours of the fields which can be edited and of those which cannot be edited as well as of the fields with read/write errors.
<u>C</u>hange Language	Alt+L	Change the language (German, English). Default.LNG will be loaded when the program is started. You can preset a specific language by copying and changing the name of German.LNG or English.LNG to Default.LNG.
<u>C</u>OM1		Select the COM1 port on the PC.
<u>C</u>OM2		Select the COM2 port on the PC.
<u>R</u>ead/Write Repeats		Here you can set the number of retries for WinP9000 if the connected device has not answered a write/read call (options: 1, 5, 10, 20).
<u>I</u>nf o		
<u>V</u>ersion		Display the version number.
<u>R</u>emark		Information about possible software versions of the ERZ 9000 T.

Examples of Applications

Example 1: Reading out and saving data

You want to read out all data (contents of the coordinate system) of a device and save them with a new name.

<u>Menu function</u>	<u>Executed command</u>
Device - Connect	Automatically recognize the device at the selected COM port.
Marks - Mark All	Mark all data fields (coordinates).
- Read	Read marked data fields.
File - Save As	Save data with a new name on the hard disk.
- Exit	Exit the program.

Example 2: Parameterizing and printing the data book

You want to write individual (or all) data from an existing file through the COM2 port to the connected device. Afterwards, you want to print a data book.

<u>Menu function</u>	<u>Executed command</u>
File - Open	Load data from the hard disk. A file with reference values or a previously edited file will be loaded and filed in the coordinate system.
Options - COM2	The device is to be connected to the COM2 port of the PC.

If you want to write individual data:

Right-click
data fields

The field is marked (another click will remove the mark again).

or if you want to write all data:

Marks
- Mark All

All data fields are marked.

Device
- Write

Marked data fields (coordinates) are transmitted to the device.

File
- Preview

Shows the data book in a version ready for print. Station data can be checked. If the data are not correct, you can correct them in the data fields which are reserved for the data book.

Editing data fields

To do this, close the Preview window and return to normal view. Change to input by left-clicking twice the desired data field in the Cover Sheet / Page or Contents 1, 2, 3 or 4 columns (at the right end of the coordinate system) and type the new text. Then check the preview again.

File
- Print

Print the data book.

File
- Exit

Exit the program.