

Technical Information for VISIT measuring instruments

With this information, we would like to show you the most important measurement components of the measurement systems for chimney sweepers, heating engineers, and other users in the industry.

Important highlights regarding our measuring instruments for exhaust gas analysis VISIT 01, VISIT 01-L or VISIT 01-LR are:

Can be designed for you with up to five gas sensors, e.g.:

- ✓ 0₂, CO up to 10.000 ppm (with a second CO sensor, automatic switch to 100.000ppm possible)
- \checkmark NO, SO₂, H₂S, optional with one infrared sensor for HC or CO₂
- ✓ For NO_2 , we recommend to use a heated hose line \rightarrow in this case **VISIT 02**

An automatic sensor fresh air flushing with second gas pump and valve (when adjustable threshold values are exceeded) controlled by the shold values is programmable and assures you high measurement comfort during burner settings. This is an important component for the protection and increase of life span of the sensors.

We separately integrated instruments for measurings of differential pressure (pressure and draught) in your exhaust gas analysis computer. This has the advantage for you that, in addition to the general menu, you can select of the following important parameters and print them separately:

\$	Chimney draught	(hPa)
\$	Differential pressure	(Pa)
\$	Flow pressure	(hPa)
\$	Static pressure	(hPa)
\$	Combustion chamber pressure	(hPa)
\$	Pressure	(hPa)
\$	Nozzle pressure	(hPa)
\$	Flow measurement	(m/sec)
8	Volume flow	(m^3/h)

To use these parameters, it is necessary to add specific correction factors and a pilot tube.

This accurate measuring system measures pressure from 0 to \pm 100 hPa. With VISIT 01-L or LR in combination with a second pressure sensor you have the possibility to measure in the range from 0 to \pm 350 hPa. This makes you flexible for multifunctional applications of simultaneous weighting of pressures at firings. As a matter of course, several pressures can be applied to this measuring component during the exhaust gas analysis. Thus, i.e. nozzle pressure as a measure of combustion performance can be measured and printed.

With integration of a second pressure sensor, the measuring system comes with a separate menu for leak tests of gas compositions according to **TRGI 96.** This also includes graphic display of the pressure pattern.

According to the roofed measuring system, the degrees of efficiency affecting the fuelling relating to H_u or H_o can be exactly measured and printed.

For the selection of fuel, 14 european commmon fuels in preassigned menus are available for you. With three additional fuels that you can program on your own, this system offers you the advantage of further applications. There is almost nothing that you cannot do, i.e. mixed combustibles of fossil and biogenous matters or low calorific gases as you find at waste dumps. On request, we are glad to integrate special fuels to be measured regarding your individual requirements.

With the program level **Favorit** it is possible to compile desired measures, as for example **with CO**, NO, NO₂, Nox, ... in:

ppm, ppm x% O₂,

mg/Nm³, Mg/Nm³y%O₂,

mg/kwh, mg/MJ

Functional characteristics can be programmed individually, i.e. x = 0% for undilated exhaust gas, y = 3%.

On top of it, you get a data memory for 1000 storages for clients as well as for measurements. With the RS 232 interface you can transfer data to e.g. Excel or Windows 95/98. As a matter of course, the system can receive and send data records in ASCII or ZIV format. For industrial users, we will complement the system with additional automatic measurement programs and memory. If desired, we can add further interfaces for digital and analogue data output. In combination with a laptop and our user software, all technical measurements regarding firings are open to you.

For a high-quality print you can select of:

- an integrated thermal printer or
- integrated matrix printer.

With the extra large display board RS 232, you can display 8 measured values or, as the case may be you can display your individual advertising text as a ticker. Therefore, you can use the display board as well as economically priced advertisement in your shop-window.

Highly appreciated by our customers are such extras as optic and acoustic supported search for nuclear energy, **display of remaining capacity of the accumulator** and turn off of the monitoring temperature, i.e. at exhaust gas analysis without thermocouples.

Henceforth, we created a measuring system for professional customer service, which in case of malfunction, still gives the possibility to do the basic burner setting.

As you can see, we designed a revolutionary system for exhaust gas analysis. We worked meticulously on "extras" regarding workflow and backround menus to make it possible, that the technician can concentrate on his work. If there are questions coming up during the use of our system, **just press "?".** This will lead you to our **help menu**, where we safed the most important details for possible cases that may happen.

The expertise of the mechanics as well as a carefull handling are not replacable. Our team will be happy to take care of you with high-quality service.

PS.: The portable measuring instrument VISIT 05 does not include some of the components, our other products have, for reasons of space and weight. Therefore, we passed on battery-powered carbon measuring with probe. For the analysis of gas components you can select of 3 sensor slots: O₂, Co and an additional sensor for NO or SO₂ (optional).

If you have further questions, please do not hesitate to consult our brochures or to contact us:

Messtechnik EHEIM GmbH

Hauffstrasse 23 D-74193 Schwaigern Tel.: (+49) 7138-92 05 10 Fax: (+49) 7138-92 05 12 An der Haardt 4 D-07557 Hundhaupten Tel.: (+49) 0365-88 202 83 Fax: (+49) 0365-88 202 84