

# Just the right flame

HC

H<sub>2</sub>S  
NO<sub>2</sub>

H<sub>2</sub>S

°C

CO<sub>2</sub>

C<sub>3</sub>H<sub>8</sub>

CO  
CH<sub>4</sub>  
SO<sub>2</sub>

SO<sub>2</sub>

NO

hPa

NO<sub>x</sub>

Messtechnik EHEIM GmbH

Measuring systems for exhaust gas analysis

The Partner for Chimney-sweeps, Heating Engineering, and Industry

HC

H<sub>2</sub>S  
NO<sub>2</sub>

H<sub>2</sub>S

°C

CO<sub>2</sub>

C<sub>3</sub>H<sub>8</sub> O<sub>2</sub>

CO

CH<sub>4</sub>

SO<sub>2</sub>

SO<sub>2</sub>  
NO

NO<sub>x</sub>

hPa

mbar

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## Welcome at Messtechnik EHEIM GmbH

Our company, Messtechnik EHEIM GmbH, was established in order to create a completely new generation of measuring instruments, reflecting our long-term experience in the field of measuring technology, and, in particular, of exhaust gas analysis.

As a user of our processor-controlled VISIT measuring equipment you will benefit from the latest developments in computer and sensor engineering. All models are produced in accordance with the most stringent manufacturing specifications and are subject to permanent quality control. The instruments are TÜV-tested and comply with the European measuring specifications.

In this brochure you will find our tested and proven VISIT series and the most important accessories, which, by the way, are compatible with many other commercial exhaust-gas analysing and measuring instruments. VISIT is standing for top quality, ease of handling, perfect service, fair prices, and a clean environment. Have a try.

Yours truly,  
Sigrid Eheim  
Managing Director



The founders' team  
Bernd Weeber, Sigrid Eheim, Jürgen Reiner, Reinhard Köppe

## Manageable multipurpose instruments for chimney-sweeps and installers

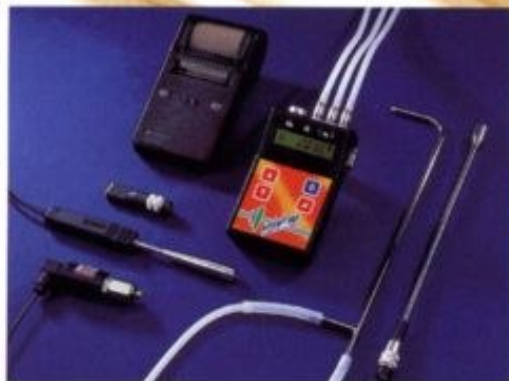
All VISIT measuring instruments are high-quality multifunction systems with integrated computing functions and which are designed, produced and marketed world-wide by EHEIM GmbH. They comply with the requirements of the German Federal Pollution Protection Act (1. BimSchV) for measuring and adjusting work for optimising the combustion of gas, oil, and solid fuel firing systems and condensing heater systems (GCV systems).

### **VISIT 05** The rugged starter model



A proven hand instrument for checking firing systems and measurements on gas firing installations. The VISIT 05 features up to 3 gas sensors  $O_2$  /  $CO$  /  $(NO)$  and offers convincing advantages:  
 $CO_2$  dew point and loss calculation with automatic switch-over to gross calorific value / continuously following chimney draught monitoring / operating on mains as well as on lead battery (no memory effect) / rapid indication of measured values /  $CO$  sensor flushing with programmable limit value / individual release of measuring units / differential pressure  $\pm 100$  hPa (mbar) / data memory for 300 customer and measurement data / RS 232 and infrared printer interface / performance-tested by TÜV Bayern (By RgG 181)

### **VISIT 07** The universal (supplementary) module



The high-precision multifunction instrument VISIT 07 is used as an independent unit or as a modular addition to our measuring systems. It can be used for measuring differential and single pressure, flow velocity, oil and gas pressure, as a gas-leak detection device, as an IR radiation thermometer, and also for random temperature measurement by means of the NiCr-Ni temperature sensors.



## Measuring instruments for exhaust gas analysis for the professional firing systems engineer

### VISIT 01

#### Professional multifunction instruments

The VISIT 01 models are fitted with up to 5 gas sensors and are supplied in a rugged metal housing. They permit continuous measurements to be carried out on combustion installations for solid, liquid, and gaseous fuels and are extremely well suitable for checking and adjusting work on oil and gas firing systems and condensing heater systems (GCV systems). These best-sellers convince every professional because of clear-cut

#### advantages:

- CO<sub>2</sub> dew point and loss calculation with automatic switch-over to gross calorific value
- Continuously following chimney draught monitoring
- Operating on mains as well as on lead battery (no memory effect) for long operating time
- Sophisticated electronics for correction of cross sensitivity
- Brilliant accuracy of measured values
- Rapid indication of measured values
- CO sensor flushing with programmable limit value
- Freely selectable units of measurement
- Differential pressure +/-100 hPa (mbar)
- Optimised data memory for 1000 customer and measurement data
- RS 232 interface
- Individual expansion possible by adding additional components
- Performance-tested by TÜV Bayern (By RgG 178)

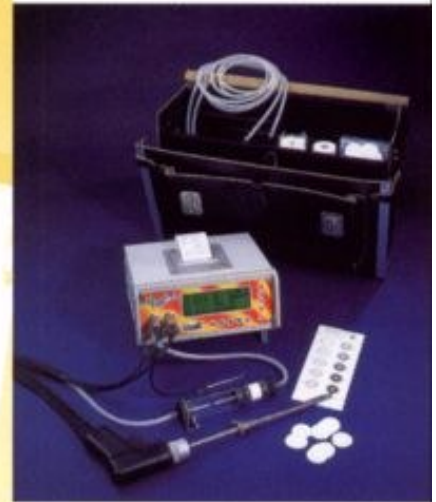
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## VISIT 01

The classic amongst the multifunction instruments

Fields of application: Measurement of oxygen, carbon monoxide, temperature of combustion air and of exhaust gas, chimney draught/ pressure, soot drawing with heated probe handle (when operating on battery).

Options: Further sensors like NO, SO<sub>2</sub>, CO up to 10 % / IR sensor CO<sub>2</sub> or HC / integrated thermal or needle printer / automatic measuring programme / solid fuel measurement.

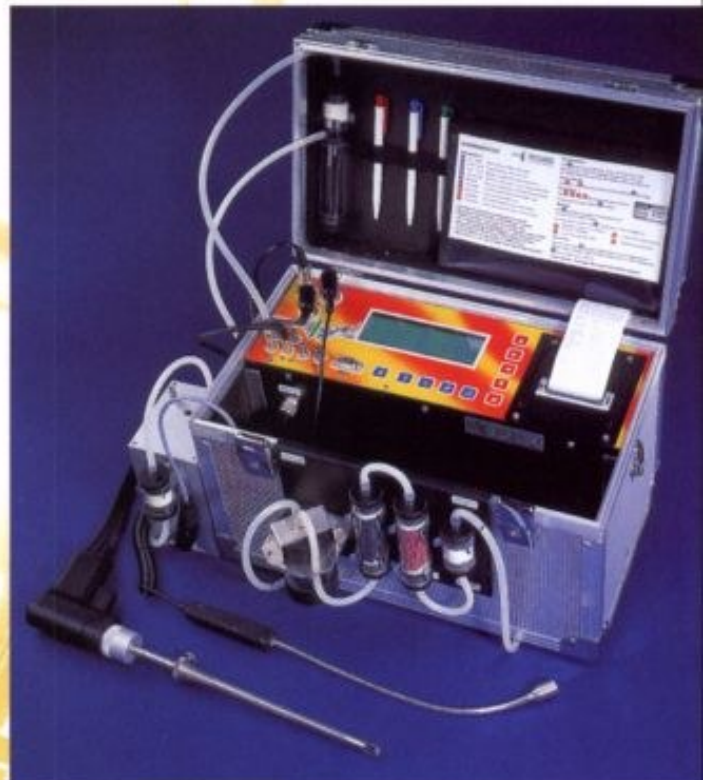


## VISIT 01 L/LR

The advanced version of the legendary VISIT 01

Basic features as those of VISIT 01 (VISIT 01 L without soot) in portable aluminium case, but with integrated thermal printer.

Options: Needle printer / 2nd pressure measurement up to +/- 350 hPa / automatic condensate drainage or external Peltier cooler with integrated condensate pump / heated gas extraction / interior device heating /  
- AUX socket with connections for:  
measurement of flow and return temperature  
- IR radiation temperature  
- gas leakage probe  
- sensor for oil and gas pressure up to 35 bar.



### Condensate trap (on left)

Optimised condensate trap for high condensate volumes.

### External Peltier cooler (centre)

Excellent condensate removal based on a consistent controlled cooler temperature of 5°C.

### Solid fuel filter set (on right)

Prefilter for removing dust, tar, aromatic hydrocarbons, nitrogen oxides, and sulphur combinations.



### Pressure testing set

for leak testing of gas piping according to TRGI 96  
(Code of practice for gas pipelines)





## **Innovative system solutions for industrial applications**

### **VISIT 02**

#### **Individual configurations**

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We are offering to specialist heating system installers, energy consultants, consulting engineers, and industrial companies the innovative VISIT 02 series for dealing with complex applications. These high-accuracy measuring instruments are fitted with up to 7 gas sensors (incl. infrared sensors for CO<sub>2</sub> and HC). With these portable or stationary analysers for individual measurement or continuous operation the various components of the system are combined as required for the application. In this context, additional options and also further modular metrologically important components are playing a decisive role.

#### **Major assets of the VISIT 02 models**

Lighted graphic display for 14 measured values at a time / 2 x RS 232 and Centronics interface / sophisticated electronics for correction of cross sensitivity / brilliant accuracy of measured values / rapid operating readiness / CO sensor flushing with programmable limit value / freely adjustable automatic measurement with mean-value generation.  
Performance-tested by TÜV Bayern (By RgG 200).

Possible applications: Continuous measurement on combustion systems for solid, liquid, and gaseous fuel, for adjusting and checking oil and gas firing systems; and condensing heater systems (GCV systems), industrial furnace installations including high-temperature processes, internal combustion engines and cogeneration plant.

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## VISIT 02 M / S

### The Big Brothers of the VISIT 01

The important assets: Optimised data memory for 5000 measurements / 2nd pressure sensor up to +/-350 hPa / integrated needle printer.  
Options: Integrated Peltier cooler with temperature control für heated hose to 180°C / heated gas extraction for accurate measurement of the water-soluble exhaust gas constituent (NO<sub>2</sub>, SO<sub>2</sub>) / 4 respectively 8 analog outputs 0-20 respectively 4-20 mA, freely programmable for all measured and calculated values.  
Further options by employing the VISIT 07 as an external measuring module: Connection of NiCr-Ni thermocouples / infrared radiation temperature / module for oil and gas pressure up to 35 bar / analog-signal detection module.



## VISIT 02 E

### The stationary service version

The drawer-type version for measurement of CO<sub>2</sub>-CO can be fitted with up to 7 sensors. This model is extremely well suitable for continuous measurements on oil and gas firing systems, condensing heater systems (GCV systems), cogeneration plant, and internal combustion engines.

Important assets are: CO sensor: Alarm with programmable limit value / flow rate measurement display / automatic condensate removal / air conditioning / RS 232 interface / for operation on mains, plus battery for bridging mains failure / 19" enclosure.

Options:

- Heated prefilter and heating tube
- 4 respectively 8 analog outputs 0-20 or 4-20 mA freely programmable
- 4 Earth-free inputs and outputs for stand-by and alarm functions.

## Large display

### For optimum presentation

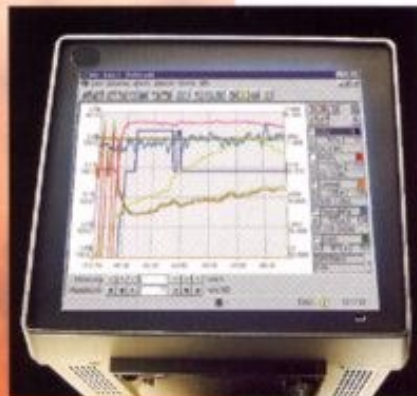
With this LED display up to 4 measured values are visible at a glance or up to 16 values are shown alternately. Measuring intervals can be utilised for presenting a logo as desired or optimised moving-text advertising (dimensions: 52 x 40 x 7 cm).



The VISIT accessory parts are compatible with many other commercial exhaust-gas analysing and measuring instruments

## WinData The VISIT measurement data software

The program is running under Windows 95, Windows 98, and is upward compatible. WinData can accept measurement data via the serial interface, can generate and store mean-values for 24 or 48 hours. Presentations are possible as tables, line plots, or bar charts. Integrated optimising calculations permit to evaluate combustion processes even with complex firing conditions. Comments can be added to each measurement group. The user is able to make a selection and to export this for further processing into a spreadsheet program.



## WinClient The measurement data and customer administration

Measurement data administration including customer administration for the VISIT measuring instruments series. The program is running under Windows 95, Windows 98, and is upward compatible. WinClient can send customer's data via the serial interface to the VISIT measuring instruments, read these after completion of the measurement from the instrument memory and allocate each measurement to the corresponding customer. New measurements can be compared with measurements stored from previous years.



## How to contact Messtechnik EHEIM GmbH :

**Messtechnik EHEIM GmbH**  
Production, Sales & Service  
Max-Eyth-Straße 11  
D-74193 Schwaigern  
Telephone: +49 (0) 7138-92 05 10  
Fax: +49 (0) 7138-92 05 12  
Email: info@messtechnik-eheim.de

**Messtechnik EHEIM GmbH**  
Sales & Service  
An der Haardt 4  
D-07557 Hundhaupten (nr. Gera)  
Telephone: +49 (0) 365-88 202 83  
Fax: +49 (0) 365-88 202 84  
Email: service@messtechnik-eheim.de

Visit us in the internet: [www.messtechnik-eheim.de](http://www.messtechnik-eheim.de)