

**Multifunctional handheld unit with data logger for measuring flow rate, flow velocity, temperature, pressure and other variables in explosive atmospheres**



**Measured variables**

- flow velocity
- volume flow/flow rate
- standard flow rate
- mass flow
- temperature
- other freely definable physical values, in so far as measurable or deducible with the sensors suitable for connection

**Media**

- gases and gas mixtures
- liquids

**Display units**

- m/s, m³/h, l/min, l/s, kg/h, ft/min, cfm
- °C, °F
- hPa, %RH, mA ...
- m³

**Advantages**

- for use in explosive atmosphere ATEX category 2G (zone 1)
- wide variety of applications due to the diversity of the sensors suitable for connection - FA, VA, TA, Pt100, ...
- data logger for up to 40,000 values with date and time
- USB interface
- 4-20 mA / 0-10 V input
- 12 V power supply for non-Höntzsch sensors
- various measuring modes
- large Display with graphical view
- easy-to-use, tactile key feedback
- with software HLOG II fully configurable on PC
- 100 storable user profiles
- protection class IP65

**Examples of application**

- landfill gas, natural gas blower, control measurement in explosive atmosphere, distribution measurement of natural gas, ...
- flow measurement in all branches of industry, municipal facilities and public authorities, research and development
- measuring gas mass flow
- flow measuring in air, exhaust air, process gases, particulate and condensate laden emissions, exhaust emissions, aggressive gases with high working temperatures
- measuring in conveying air containing cement, carbon or toner
- measuring tasks on filters and ventilators
- system method to determine flow rate or average flow velocity of single measurements

## Inputs

### FA:

for vane wheel flow sensors FA

### FT:

FA with temperature probe Pt100

### FAR:

FA with  $\pm$ directional sensing of flow

### VA:

for vortex sensors VA

### VAT:

VA with temperature probe Pt100

### TA:

for TA sensors with thin-film sensor element

### TAT:

temperature value TA sensor

### Pt100:

temperature probe Pt100 in four-wire system

### analog:

4-20 mA / 0-10 V selectable

## USB interface

for data logger readout, for configuration, for external power supply via PC or mains adapter with USB connector (use only in non-explosive atmosphere).

## Connection options

flange socket

8-pin : FA/FT/FAR  
VA/VAT/Pt100

5-pin : TA

12-pin : analog input

USB

Typ 'B' : PC interface  
mains supply

## Power supply

mains or battery operated:  
4 Mignon AA 1.5 V batteries

## Keypad

membrane keypad with 9 embossed keys with tactile feedback

## Display

graphic display

## Real time clock

date/time for data logging, with buffering

## Housing

plastic (ABS) with integrated holding magnet  
W/H/L = 96/42/197 mm

## Type of protection

IP65

## Working temperature range

-10 °C ... +50 °C

## Weight

approx. 590 g

## Modes of measurement

instantaneous / long-term: 'Single measure', automatic 'AUTO', 'START' (timer), 'START-STOP', determination of average, minimum and maximum values (with optional PC-Software HLOG II)

## Data logger

up to 40,000 data sets with date and time. Automatic storage in 'AUTO' mode.

The data can be transferred to a PC via a USB interface and PC software HLOG II.

## Sensor configuration data

for 100 sensors, retrieval by means of serial number or random identifier. Configuration on the unit or PC with PC software HLOG II.

## Explosion protection

Type of protection ib handheld unit for ATEX category 2G (zone 1)

Marking:

Ⓔ II 2G Ex ib IIC T4 Gb

## Measured value display

instantaneous values every second. Display of these values also with long-term measurement in 'START', 'START/STOP' and 'Single measure' mode.

Display up to 3 values simultaneously.

Counter available with long-term measurement

## Prompts

status updates, display of time lapse during long-term measurement

## Storage

inputs, parameters and performance data remain stored after switching off the device

## Standard conditions

adjustable for FA-, VA-, TA-sensors

## Menu navigation

German, English, French

## Operating Instructions

German, English

Order information / Accessories		Article No.
<b>Handheld unit flowtherm Ex</b>		A000/570
<b>USB plug-in power supply</b> 100-240 VAC, 5 V / 1000 mA for mains supply (use only in non-explosive atmosphere) incl. 1.8 m USB cable		A000/561
<b>Software Set HLOG II</b> configuration of handheld unit and displaying data on a PC data export as XLS and CSV file, chart export as JPG file incl. 1.8 m USB cable and case		A000/522
<b>associated sensors FA, VA, TA</b> as per sensor datasheet		
<b>Temperature probe TF400-Ex</b> Insertion probe for measuring range -200 °C ... +400 °C, sensor length 220 mm, Ø 4 mm, total length with handle 373 mm, for use in ATEX category 2G (zone 1)		A000/035
<b>Battery pack Duracell Simply MN1500 AA, LR6</b> certificated batteries (4 pcs) for flowtherm Ex to be used in explosive atmospheres		A000/007
<b>Extension cable</b> for input FA, FAR, FT, VA, VAT waterproof connector 423-8 on both sides		
	3 m	A000/015
	5 m	A000/016
longer than 5 m	basic price	A000/025
longer than 5 m	per m	A000/026
<b>Y-Cable</b> for simultaneous connection of a flow sensor and temperature probe to the input of the flowtherm Ex, resistant to +60 °C, IP40, connector 680-8		A000/516
<b>Connector analog input</b> 680-12, solder lugs		A000/565
<b>Connector cable analog input</b> Connector 680-12, IP40, exposed wire ends marked, 1.8 m		A000/562
<b>Carrying case type G</b> Dimensions 497x411x140 mm Capacity suggestion: 1 flowtherm Ex 1 plug-in power supply 1 extension cable 1 flow sensor 1 extension rod		A000/515