

# MICRO IV

## Short-form instructions

Firmware Version 2.14 2006/09/08 180-000.57 OM Short G223.doc



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**Diffusion inlet**

**Battery and sensor cover**

**Detection principle**  
Electrochemical sensor (EC)

**Gas supply**  
Diffusion or pump (optional)

**Climate conditions**  
-20...+55(45)°C / 5 ...95%r.h./  
700...1300hPa

**Operational time**  
up to 9 months


**Battery type:**  
*Duracell Procell MN 1500 LR6 AA*

**Weight: 84 g**

**Dimensions: 47 x 88 x 25 mm**

**Protection: IP 56**


**Approval:**  
 Ⓢ II 2G EEx ib IIC T3 (Ta -20 ..+55°C)  
 Ⓢ II 2G EEx ib IIC T4 (Ta -20 ..+45°C)




**Alarm LEDs**

**Audible alarm (95 dB)**

**Display (for gas & concentration)**
















 **Turn on**  
**Push long: Turn off**  
**Short: Reading average and peak values, push again shortly to go on (for TOX: 1. MAX, 2. STEL, 3. TWA; for OX: 1. MIN, 2. MAX).**



**QUIT**  
**With alarm: Reset**  
**With reading MIN/MAX: Clear value**

 **Short: Start of test function (display test, LED test, buzzer test, battery capacity)**  
**Long: Check of time and date**

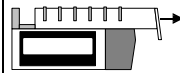
Gas Range	H <sub>2</sub>	O <sub>2</sub>	CO	H <sub>2</sub> S	NO	NH <sub>3</sub>	HCN	HCl	C <sub>2</sub> H <sub>4</sub> O	ClO <sub>2</sub>	COCl <sub>2</sub>	PH <sub>3</sub>	SiH <sub>4</sub>	THT	Cl <sub>2</sub>	O <sub>3</sub>	NO <sub>2</sub>	SO <sub>2</sub>
	4.0	25	300	100	100	200	50	30	20	2	1	10	20	100	10	1	30	10
	Vol. %	Vol. %	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	mg/m <sup>3</sup>	ppm	ppm	ppm	ppm
Alarm A <sub>1</sub>	0.2	19.0	30	10	25	50	10	5	2	0.1	0.1	0.3	5	25	0.5	0.1	5	2
Alarm A <sub>2</sub>	0.4	17.0	60	20	50	100	20	10	4	0.2	0.2	0.4	10	50	1	0.2	10	4
Alarm A <sub>3</sub>	0.6	23.0	300	100	100	200	50	30	20	1	1	10	20	100	10	1	30	10
Test gas	1	20.9	200	50	100	100	50	10	20	1	1	5	20	37	5	0.7	20	10

Other detection ranges on request

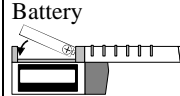
<b>Turn On/Off</b>	Turn the detector on by inserting a battery or by pushing  . Self test and battery check are effected automatically. The battery capacity is indicated in %. <span style="border: 1px solid black; padding: 2px;">100 bAT</span> The warm-up time is accompanied by a countdown in the display. <span style="border: 1px solid black; padding: 2px;">60 SEC</span> Once the self test is completed, the MICRO IV turns to detection mode. The LCD display indicates gas and concentration alternately. <span style="border: 1px solid black; padding: 2px;">0 CO</span> <span style="border: 1px solid black; padding: 2px;">0 ppm</span>
<b>Alarm</b>	Exceeded alarm thresholds trigger an alternating audible and visual alarm. The alarms are self-resetting.
<b>Alarm 1</b>	2 x  2 x  2 x  2 x  ... <span style="border: 1px solid black; padding: 2px;">10 AL1</span>
<b>Alarm 2</b>	4 x  4 x  4 x  4 x  ... <span style="border: 1px solid black; padding: 2px;">20 AL2</span>
<b>Alarm 3</b>	8 x  8 x  8 x  8 x  ... <span style="border: 1px solid black; padding: 2px;">100 AL3</span>
<b>Battery alarm</b>	The detector gives a warning with a remaining operation time of 15 minutes. Remaining battery capacity 5%. → <span style="border: 1px solid black; padding: 2px;">5 bAT</span> 2 x  6 seconds. Pause 2 x  6 seconds. Pause ...

Key	Function
	With detector turned off: Push short = <b>Turn on</b> Push long = <b>Turn off</b> <b>In operation</b> Push short = <b>Indication of average and peak values</b> Reading with TOX sensors: TLV, then STEL, then TWA. Reading with OX sensors: MIN, then MAX. Push the key again for going to the next reading. The readout is shown for approx. 5 seconds.
<b>QUIT</b>	With active alarm, if allowed acc. to configuration: <b>Alarm reset</b> . During indication of MIN, MAX the displayed <b>value can be cleared</b> .
	Push short: <b>Test function</b> of the detector is started, battery capacity is shown in the display. The test function includes: <ul style="list-style-type: none"> <li>○ Display test (activating all digits for approx. 2 seconds)</li> <li>○ LED test (both LEDs are activated shortly one after the other)</li> <li>○ Buzzer test (the buzzer is turned on for approx. 2 seconds)</li> <li>○ Display of battery capacity. Should the capacity be too low, the detector is being turned off.</li> </ul> Push long: <b>Check of time and date</b> . The date is shown first, then the time by pushing the key again.

**Replacement of Battery and Sensor (only in safe areas)**




For replacement slide the battery/sensor cover upwards and remove it.




**Battery**

Inserting a new battery (type Mignon AA) starts the self test and the battery check. For Ex-approval make sure that you use only the approved type of battery. Watch out for the correct polarity (plus pole should be inserted first).



**Sensor**

**Attention!** Remove the battery before replacing the sensor. Only use a sensor which corresponds with the marking of your MICRO IV. Otherwise the LEDs will give a fault signal: SENS.ERR

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