

# MICRO III series

Single-gas detector for toxic gases and oxygen



Extremely lightweight and small

Ultra bright alarm lights and loud audible alarm

Smart sensor technology

User replaceable battery with up to nine months of operation time

EEx ib IIC T6/T5

U.L. Pending

Worldwide Supplier of Gas Detection Solutions



# The smallest single-gas detector

## Small, light and robust

The MICRO III is an extremely small instrument compared to other detectors. With its dimensions of only 47 x 88 x 25 mm (WxHxD), it weighs only 61 grams and can comfortably fit into a shirt pocket. A built-in clip secures the MICRO III safely to a belt or pocket. The casing is extremely shock and scratch resistant. The protection type IP 56 indicates that the instrument is sealed against dust and water. The MICRO III uses the AQUA-SHIELD (accessory sensor inlet) which ensures that the monitor will provide excellent performance in harsh conditions.

## More protection through easier operation

The G 201 and the G 202 is produced without buttons or switches. Therefore an operating error is completely eliminated and time consuming training is reduced.

With a single battery or accumulator, the MICRO III can measure and monitor up to nine months without interruption. The battery can simply be replaced. After a battery change, the MICRO III is immediately functional without any maintenance.

The plug-in smart sensor can be easily replaced. The MICRO III recognizes the new sensor type, another measuring gas, detection range, calibration curve, as well as alarm threshold values.

## Numerous Features

The MICRO III comes standard with many features including automatic zeroing, Auto-Cal calibration, confidence bleep, battery check, and three factory set alarm points.

The following models are available:

**G201** with loud alarm horn and bright alarm lamp

**G202/G212** as G 201, additional: display for gas concentration, battery capacity and service control

**G203/G213** as G 202, additional: Peak/minimum calibration, TWA/STEL, control keys for display light and service functions.

All MICRO III devices feature audible or a visible confidence signal. Zero point adjustments can be carried out quickly and easily in fresh air.

## Attachable pump

An electrical high-performance pump will take samples of gases from mines or tanks. The pump replaces the battery



cover and is a fixed part of the instrument with its own power supply. The operation of the pump will have no influence on the operation time of the MICRO III.

## Loud audible alarm

The audible alarm of the MICRO III has a changing frequency. Machinery noises do not interfere with the horn signal, like in the case of a monotone alarm horn. Simultaneously, two very bright, alternately flashing LED's indicate a gas alarm. The LED's are visible at 360°. The three alarm levels and the battery alarm are clearly distinguishable.

## MICRO III

### Detection principles

Electrochemical Sensor

### Gas supply

Diffusion / pump (Accessory)

### Temperature range

-20 .. +50 °C

### Humidity

5 .. 99% r.h.

### Ambient pressure

700 .. 1300 hPa

### Dimensions

47 x 88 x 25 mm (WxHxD)

### Weight

61 – 90 g

### Power supply

Dry cell battery (AA 1,5 V)

### Operational Time

6 to 9 months

### Casing

High impact ABS, titanium coated  
Protection: IP 56

### Alarms

3 Alarm thresholds  
Battery alarm  
Visual – 2 LED's, 360° visible  
Audible – Horn, 95 dB at 30 cm

### Approvals

EEx ib IIC T5 up to 50 °C  
EEx ib IIC T6 up to 40 °C  
U.L. pending

## Technical Data

### Gases and Detection Ranges

#### For G201, G 202 and G 203

Oxygen, O<sub>2</sub>, 25 Vol%  
Carbon monoxide, CO, 300 ppm  
Hydrogen sulphide, H<sub>2</sub>S, 100 ppm

#### For G202 and G203

Carbon monoxide, CO, 1000 ppm  
Carbon monoxide, CO, 2000 ppm  
Sulphur dioxide, SO<sub>2</sub>, 10 ppm  
Nitrogen monoxide, NO, 100 ppm  
Chlorine dioxide, ClO<sub>2</sub>, 2 ppm  
Hydrogen chloride, HCN, 30 ppm  
Hydrogen cyanide, HCN, 100 ppm  
Ammonia, NH<sub>3</sub>, 200 ppm  
Ethylene oxide, C<sub>2</sub>H<sub>4</sub>O, 20 ppm  
Phosphine, PH<sub>3</sub>, 10 ppm  
Silan, SiH<sub>4</sub>, 20 ppm  
Phosgene, COCl<sub>2</sub>, 1 ppm  
Tetrahydrothiophen, THT, 100 mg/m<sup>3</sup>  
Hydrogen, H<sub>2</sub>, 2000 ppm

#### For G212s and G213s

Chlorine, Cl<sub>2</sub>, 10 ppm  
Nitrogen dioxide, NO<sub>2</sub>, 30 ppm

We reserve the right of modification



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