

▶ **BM25**

ATEX multigas area monitor



Product description

The **BM25** is a multi gas area monitor, able to monitor up to 5 gases simultaneously, concentrating the benefits of a fixed detector in a transportable device. It is designed to protect intervention or maintenance teams in "gas-risk areas" during development or maintenance work.

▶ **Very powerful audible and visual alarms**

The **BM25** construction site area gas monitor features a 360° intense flashing light, as well as a 103 dB siren (at one meter). Measurements of ELVs and OELs are available as well as the possibility of recording data over a 4 months period (in a 5 gas configuration).

▶ **A wide range of interchangeable sensors**

The **BM25** offers a large range of possible combinations (among 32 interchangeable sensors), which allows it to be used in many activity fields such as petrochemicals, public works, interventions in confined spaces or in wastewater treatment plants.

▶ **Up to 170 hours run time autonomy**

The batteries of the **BM25** ensure continuous operation for more than 170 hours depending on its configuration, for a recharge time of only 4:30. It is possible to maintain the device's power charge in zone for permanent use (except alarm) to ensure long-term work (feeding kit).

▶ **Main assets**

- ATEX multi-gas detector from 1 to 5 gases (depending on gas type)
- Wide range of interchangeable gas sensors
- Powerful audible alarm (103dB at 1 meter) & 360° Flashing lights
- Continuous operating autonomy up to 170 hours
- Specifically designed to withstand shocks
- Easily transportable, less than 7 kilos

Technical specifications

Multi gas detection system: 1 to 5 gases

Main detected gases: AsH₃, B₂H₆, C₂H₄O, Cl₂, CO, CO₂, COCl₂, F₂, H₂S, HCl, HCN, HF, N₂H₄, NO, NO₂, NH₃, O₂, O₃, PH₃, SiH₄, SO₂, VOC (volatile organic compounds) & combustible gas (all flammable gases)

Sensors:

- Interchangeable pre-calibrated smart bloc without adjustment.
- Automatic sensor and parameter recognition (alarms, wear rate...)

Power:

- NiMH battery pack
- Power feeding possible in zones 0, 1, 2

Charger:

- Integrated and intelligent, powered by 12 / 30VDC or 110VAC, 220VAC
- Charge time : 4 hours 30 mn

Autonomy:

Exemple for EXPLO/O₂/TOX1/TOX2 configuration : 100h

Functional check:

- Auto zero : when starting the device and on request
- Self test at commissioning

Display: Large backlit LDC display. FLIP FLAP function

Alarm levels:

- 2 instantaneous thresholds per channel
- ELV / OEL in toxic gas (alarm on sliding average over 15 minutes and 8 hours)
- High and low threshold for oxygen (2 optional low thresholds)

Indicator light :

- 20 ultra-bright LEDs visible in all directions and protected by metal hoops
- Bi-directional howler: 103 db to 1m

Programmable inputs/outputs:

- 2 inputs: 1 logic input for remote acknowledgment + 1 logic input type "punch" or "alarm report" or "interconnection"
- 2 "relay" logic outputs: 1 fault relay output + 1 gas alarm output
- 1 specific input / output type: 4-20mA, RS485 ...

Waterproof: IP 66 certified

Size / Weight: approx. 6,8 kg / L 180 x H 467 x W195

Certifications:

- II 1GD EEx ia IIC T4
- II 2 GD EEx ia d IIC T4 (with CO₂ sensor)

Unit selection

| Designation | Reference |
|--------------------------------------|-----------|
| BM25 area gas monitor (without pump) | 6514842-D |
| BM25 area gas monitor (with pump) | 6514872-P |

Sensor selection

| Gas | Measuring range | Sensor type | Reference |
|--|------------------------------------|--------------------------|-----------|
| CH4 (Methane) | 0-100% LEL | Catalytique | 6313888 |
| CH4 (Methane) | 0-100% LEL | IR | 6314064 |
| CH4 (Methane) | 0-100% LEL | IR | 6314065 |
| C3H8 (Propane) | 0-100% LEL | IR | 6314087 |
| C4H10 (Butane) | 0-100% LEL | IR | 6314088 |
| CH4 (Methane) | 0-100% vol. | IR | 6314092 |
| CO2 (Carbon dioxide) | 0-5% vol. | IR | 6313818 |
| AsH3 (Arsine) | 0-1 ppm | Electrochimical (mini) | 6313811 |
| Cl2 (Chlorine) | 0-10 ppm | Electrochimical (mini) | 6313809 |
| Cl2 (Chlorine) | 0-10 ppm | Electrochimical (medium) | 6313843 |
| ClO2 (Chlorine dioxide) | 0-3 ppm | Electrochimical (mini) | 6313841 |
| CO (Carbon monoxide) | 0-1000 ppm | Electrochimical (mini) | 6313787 |
| CO (Carbon monoxide) | 0-2000 ppm | Electrochimical (mini) | 6313826 |
| CO (Carbon monoxide) | 0-500 ppm | Electrochimical (mini) | 6313868 |
| CO/H2S (Carbon monoxide/ Hydrogen sulphide) | 0-1000 ppm (CO) 0-100 ppm (H2S) | Electrochimical (medium) | 6313823 |
| COCl2 (Phosgene) | 0-1 ppm | Electrochimical (mini) | 6313812 |
| ETO (Ethylene oxide) | 0-30 ppm | Electrochimical (medium) | 6313821 |
| F2 (Fluorine) | 0-1 ppm | Electrochimical (mini) | 6313820 |
| H2 (Hydrogen) | 0-2000 ppm | Electrochimical (mini) | 6313803 |
| H2S (Hydrogen sulphide) | 0-100 ppm | Electrochimical (mini) | 6313788 |
| H2S (Hydrogen sulphide) | 0-100 ppm | Electrochimical (mini) | 6314206 |
| HCl (Hydrogen chloride) | 0-30 ppm | Electrochimical (mini) | 6313804 |
| HCN (Hydrogen cyanide) | 0-30 ppm | Electrochimical (mini) | 6313805 |
| HF (Hydrogen fluoride) | 0-10 ppm | Electrochimical (mini) | 6313806 |
| N2H4 (Hydrazine) | 0-1 ppm | Electrochimical (mini) | 6313879 |
| NH3 (Ammonia) | 0-100 ppm | Electrochimical (mini) | 6313799 |
| NH3 (Ammonia) | 0-1000 ppm | Electrochimical (mini) | 6313800 |
| NO (Nitric oxide) | 0-300 ppm | Electrochimical (mini) | 6313802 |
| NO (Nitric oxide) | 0-300 ppm | Electrochimical (medium) | 6313856 |
| NO2 (Nitrogen dioxide) | 0-30 ppm | Electrochimical | 6313801 |
| NO2 (Nitrogen dioxide) | 0-30 ppm | Electrochimical (medium) | 6313857 |
| O2 (Oxygen) | 0-30% vol. | Electrochimical (medium) | 6313780 |
| O2 (Oxygen) | 0-30% vol. | Electrochimical | 6313817 |
| O3 (Ozone) | 0-1 ppm | Electrochimical | 6313807 |
| PH3 (Phosphine) | 0-1 ppm | Electrochimical | 6313810 |
| PID | 0-1500 ppm | Electrochimical (medium) | 6313998 |
| SiH4 (Silane) | 0-50 ppm | Electrochimical | 6313808 |
| SO2 (Sulfur dioxide) | 0-30 ppm | Electrochimical (medium) | 6313819 |
| SO2 (Sulfur dioxide) | 0-100 ppm | Electrochimical (medium) | 6313822 |

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