

# Midas-M<sup>®</sup> 4-in-1

Fixed gas detector with integrated pump and pre-calibrated sensor cells

Intelligent multi-gas sensors

Simplified maintenance

Detection range up to 30 meters



## Technical specifications

**Dimensions:** 136 × 83 × 152 mm

**Weight:** 1.3 kg

**Power Supply:** 24 VDC nominal (20.4 to 26.4 VDC)

**Power Consumption:** ≤ 12.9 W

**Outputs:**

- 4–20 mA analog output (3-wire source, 3-wire sink, or 4-wire isolated)
- 3 configurable relays (Alarm 1, Alarm 2, Fault)
- Modbus TCP / Ethernet PoE communication
- Optional relays: 8 additional relays

**Display:**

- Large multicolor backlit LCD
- 4-character alphanumeric display
- Channel concentration graphs and icon-based status indicators

**Sampling Pump:** 600 mL/min

**Sampling Line:** Up to 30 m

**Storage Temperature:** +5 to +25 °C (41 to 77 °F)

**Operating temperature:** 0 to 40 °C

**Wiring:** 2-wire, 14 AWG max / CAT5 or equivalent, RJ45 connector

**Warranty:** 1 year (transmitter) – 2 years (sensor cartridge)

### Applications

The MIDAS<sup>®</sup> M 4-in-1 is designed for gas monitoring in semiconductor manufacturing facilities and other sensitive industrial environments.

It is particularly suitable for:

- Chemical Vapor Deposition (CVD) systems
- Gas cabinets
- Wafer dryers
- Wafer reactors

## Product description

The Honeywell MIDAS<sup>®</sup> M 4-in-1 is a fixed gas detector with an integrated sampling pump, designed for the simultaneous detection of multiple gases. Equipped with an intelligent 4-in-1 multi-sensor cartridge, it can monitor over 30 gases from a local or remote sampling point up to 30 meters away. Its modular design simplifies installation, maintenance, and component replacement.

### Key Features

The MIDAS<sup>®</sup> M 4-in-1 combines an intelligent 4-in-1 sensor cartridge, a large backlit LCD display, and Modbus TCP, PoE, 4–20 mA, and relay communication options for seamless integration into monitoring systems. Its modular design, Reflex<sup>®</sup> sensor health monitoring, and TempraSure<sup>™</sup> technology help ensure reliable operation and simplified maintenance.

| Gas Name              | Chemical Formula                 | Detection Range | Sensor Reference |
|-----------------------|----------------------------------|-----------------|------------------|
| Hydrogen Chloride     | HCl                              | 0 – 8 ppm       | MMS-E2           |
| Boron Trichloride     | BCl <sub>3</sub>                 | 0 – 8 ppm       | MMS-E2           |
| Dichlorosilane        | SiH <sub>2</sub> Cl <sub>2</sub> | 0 – 8 ppm       | MMS-E2           |
| Hydrogen Bromide      | HBr                              | 0 – 8 ppm       | MMS-E2           |
| Silane                | SiH <sub>4</sub>                 | 0 – 20 ppm      | MMS-X2           |
| Disilane              | Si <sub>2</sub> H <sub>6</sub>   | 0 – 20 ppm      | MMS-X2           |
| Hydrogen              | H <sub>2</sub>                   | 0 – 1000 ppm    | MMS-G2           |
| Chlorine              | Cl <sub>2</sub>                  | 0 – 2 ppm       | MMS-L2           |
| Ammonia               | NH <sub>3</sub>                  | 0 – 100 ppm     | MMS-A2           |
| Carbon Monoxide       | CO                               | 0 – 100 ppm     | MMS-C2           |
| Phosphine             | PH <sub>3</sub>                  | 0 – 1200 ppb    | MMS-R2           |
| Ozone                 | O <sub>3</sub>                   | 0 – 0.4 ppm     | MMS-U2           |
| Oxygen                | O <sub>2</sub>                   | 0 – 25 % v/v    | MMS-D2           |
| Sulfur Dioxide        | SO <sub>2</sub>                  | 0 – 8 ppm       | MMS-S2           |
| Hydrogen Fluoride     | HF                               | 0 – 12 ppm      | MMS-Z2           |
| Boron Trifluoride     | BF <sub>3</sub>                  | 0 – 8 ppm       | MMS-Z2           |
| Tungsten Hexafluoride | WF <sub>6</sub>                  | 0 – 12 ppm      | MMS-Z2           |