

# ► MIDAS® S2

## Fixed Gas Detector with Integrated Pump and Pre-Calibrated Sensors



### Product Description

The Honeywell **MIDAS® S2** is a modular high-performance fixed gas detector designed for the fast and reliable detection of more than 35 toxic, flammable, and ambient gases. It features interchangeable pre-calibrated sensors and an integrated sampling pump, ensuring immediate commissioning, simplified maintenance, and increased reliability. With its compact design and quick installation, the MIDAS® S2 is perfectly suited for demanding industrial environments.

#### ► Key Features

The **MIDAS® S2** is equipped with interchangeable pre-calibrated sensors and an integrated pump capable of sampling air up to 30 meters. Its TFT color display and LED indicators provide clear and immediate readings. Digital communication via Modbus TCP/IP and PoE ensures seamless integration into existing monitoring systems. Password protection enhances safety, while the front-access design simplifies maintenance and reduces service time. Thanks to its compact and robust design, it is ideal for space-constrained industrial environments.

#### ► Typical Applications

The **MIDAS® S2** is ideally suited for critical applications such as semiconductor manufacturing, research and university laboratories, chemical and light industrial processes, aerospace facilities, and wastewater treatment plants.

### Technical Specifications

#### Dimensions (with sensor)

- 138,6 × 55 × 148 mm

#### Weight

- 1.03 kg (transmitter) / 34–73 g (sensor)

#### Power supply

- 24 VDC nominal (20.4–26.4 VDC) or 48 VDC PoE (IEEE 802.3af)

#### Power consumption

- < 5 W (normal), ≤ 12.95 W (full load)

#### Outputs

- Analog 4–20 mA (sink/source)
- Relays (alarm 1, alarm 2, fault): 1A @ 30VDC or 0.5A @ 125VAC max
- Digital communication: Modbus TCP/IP / PoE

#### Display

- 2.4" TFT IPS color screen – 4-button interface – Viewing angle ≥ 160°

#### Sampling pump

- 500 ml/min

#### • Sampling line:

- FEP Ø 3.18 mm ID × 6.35 mm OD – up to 30 m

#### Operating temperature

- 0 to +40 °C

#### Wiring:

- 2-wire (4–20 mA, max. 14 AWG) / CAT5 RJ45 cable for digital communication

#### Warranty

- 1 year (transmitter) – 2 years (sensors)

Gas	Formula	Detection Range	Sensor Model
Hydrogen (LEL)	H <sub>2</sub>	0–100% LEL	MIDAS S2-E-LEL
Methane (LEL)	CH <sub>4</sub>	0–100% LEL	MIDAS S2-E-LEL
Propylene (LEL)	C <sub>3</sub> H <sub>6</sub>	0–100% LEL	MIDAS S2-E-LEL
Boron Trichloride	BCl <sub>3</sub>	0–8 ppm	MIDAS S2-E-HCL
Dichlorosilane	H <sub>2</sub> Cl <sub>2</sub> Si	0–8 ppm	MIDAS S2-E-HCL
Hydrogen Bromide	HBr	0–8 ppm	MIDAS S2-E-HCL
Hydrogen Chloride	HCl	0–8 ppm	MIDAS S2-E-HCL
Ammonia	NH <sub>3</sub>	0–100 ppm	MIDAS S2-E-NH3
Ozone	O <sub>3</sub>	0.036–0.4 ppm	MIDAS S2-E-O3X
Chlorine	Cl <sub>2</sub>	0–2 ppm	MIDAS S2-E-HAL
Hydrogen (ppm)	H <sub>2</sub>	0–1000 ppm	MIDAS S2-E-H2X
Silane	SiH <sub>4</sub>	0–20 ppm	MIDAS S2-E-SHX
Disilane	Si <sub>2</sub> H <sub>6</sub>	0–20 ppm	MIDAS S2-E-SHX
Boron Trifluoride	BF <sub>3</sub>	0.72–8 ppm	MIDAS S2-E-HFX
Hydrogen Fluoride	HF	0–12 ppm	MIDAS S2-E-HFX
Tungsten Hexafluoride	WF <sub>6</sub>	1.05–12 ppm	MIDAS S2-E-HFX
Carbon Monoxide (standard)	CO	0–100 ppm	MIDAS S2-E-COX
Carbon Monoxide (high)	CO	0–100 ppm	MIDAS S2-E-COH
Nitrogen Trifluoride	NF <sub>3</sub>	0–40 ppm	MIDAS S2-E-XHF
Methyl Fluoride	CH <sub>3</sub> F	0–120 ppm	MIDAS S2-E-XHF
Sulfur Dioxide	SO <sub>2</sub>	0–8 ppm	MIDAS S2-E-SO2
Hydrogen Sulfide	H <sub>2</sub> S	0–40 ppm	MIDAS S2-E-H2S