

## ► SI-H100

### Fixed gas detector with integrated sampling pump



### Product description

The SI-H100 is a stationary gas detector integrated to respond quickly and accurately to toxic or flammable gases' presence in ambient air. Small, compact, and lightweight, it is ideal for use in light industry, laboratories, semiconductor processing, or wastewater treatment.

In its standard version, the SI-H100 features a large LCD screen, a 4-20 mA linear output, alarm relays for control functions, and Modbus and Ethernet TCP/IP communication. The integrated gas suction pump is enable to sample distances of up to 30 meters.

Sensor cartridges are pre-calibrated, and alarm thresholds, making periodic sensor replacement quick and easy. The original calibration certificate is stored in the sensor's memory and can be retrieved by connecting to the sensor via Ethernet communication.

### Technical specifications

**Gas detection:** BCl<sub>3</sub>, C<sub>3</sub>H<sub>8</sub>, Cl<sub>2</sub>, CH<sub>4</sub>, CO, H<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, H<sub>2</sub>S, HC, HCl, HF, NH<sub>3</sub>, NO<sub>2</sub>, O<sub>2</sub>, O<sub>3</sub>, PH<sub>3</sub>, SiH<sub>4</sub>, SO<sub>2</sub> & VOC

**Sensors:** Intelligent sensor cartridge with integrated electronic calibration certificate and alarm parameters

**Display:** 4-character alphanumeric display with separate units of measurement, flow rate histogram, and various other indicators (icon-driven)

**Keypad:** Membrane (4 keys)

**Operating voltage:** 24 V CC (nominal) +/- 10 %

**Outputs:** 24 V CC (nominal) +/- 10 %

- Linear 4-20 mA
- 3 configurable relays, NO or NC (2 alarms + default)
- RS-485 interface
- TCP/IP communication

**Audible alarm:** 90 dB at 1 meter

**Integrated suction pump system:** 90 dB at 1 meter

**Sampling time:** 92 to 30 seconds max.

**Sampling tube input/output:** 91/4" teflon

**Tubing length:** Up to 30 meters (100 feet)

**Pump life:** 2 years old

**Event logging** to view sensor history

**Material:** Steel housing with paint finish

**Dimensions:** 124 x 65 x 155 mm (H x L x D)

**Weight:** 2 kg

**Wall-mounting** with 2 pre-drilled holes on the rear frame

**Operating temperature:** 0°C to 40°C

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

Gas	Sensor	Range	Resolution
BCl <sub>3</sub> (Boron trichloride)	EC	0-30% Vol.	0.1 % Vol.
C <sub>3</sub> H <sub>8</sub> (Pentane)	IR	0-100% LEL	1% LEL
CH <sub>4</sub> (Methane)	CAT	0-100% LEL	1% LEL
CH <sub>4</sub> (Methane)	IR	0-100% LEL	1% LEL
Cl <sub>2</sub> (Chlorine)	EC	0-20 ppm	0.1 ppm
CO (Carbon monoxide)	EC	0-500 ppm	1 ppm
H <sub>2</sub> (Hydrogene)	CAT	0-100% LEL	1% LEL
H <sub>2</sub> (Hydrogene)	EC	0-1000 ppm	within 5 ppm
H <sub>2</sub> O <sub>2</sub> (Peroxide)	EC	0-10 ppm	0.1 ppm
H <sub>2</sub> S (Hydrogen sulphide)	EC	0-200 ppm	1 ppm
HC (Hydrocarbon)	CAT	0-100% LEL	1% LEL
HCl (Hydrogen chloride)	EC	0-10 ppm	0.1 ppm
HF (Hydrogen fluoride)	EC	0-5 ppm	0.1 ppm
NH <sub>3</sub> (Ammonia)	EC	0-100 ppm	1 ppm
NO <sub>2</sub> (Nitrogen dioxide)	EC	0-20 ppm	0.1 ppm
NO <sub>2</sub> (Nitrogen dioxide)	EC	0-20 ppm	0.1 ppm
O <sub>2</sub> (Oxygene)	EC	0-30% Vol.	0.1 % Vol.
O <sub>3</sub> (Ozone)	EC	0-5 ppm	0.1 ppm
PH <sub>3</sub> (Phosphine)	EC	0-20 ppm	0.1 ppm
SiH <sub>4</sub> (Silane)	EC	0-5 ppm	0.1 ppm
SO <sub>2</sub> (Sulphur dioxide)	EC	0-20 ppm	0.1 ppm
VOC	PID	0-1000 ppm	within 3 ppm