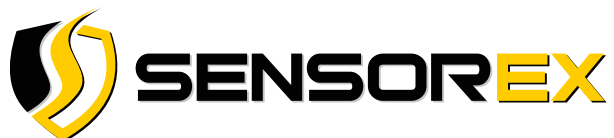




## SX-ALPHA GAS DETECTOR





# SX-ALPHA GAS DETECTOR



## Award-winning design

SX-Alpha was designed by the late award-winning designer Vikke Hyvönen (Edea Design). The technical design of our products has guaranteed a fluent user experience. The product has been awarded the Design from Finland label thanks to its comprehensive design.



**Designed and manufactured in Finland**



**Smart sensor module reduces maintenance costs and increases reliability**

- Reduces the risk of explosions and false alarms
- TrueLEL™ multi-gas measurement technology
- Patented MPS sensor with a service life of up to 15 years
- Factory calibrated, does not require field calibration
- Immune to sensor poisoning and overexposure



**RS-485 Modbus RTU, 4-20mA, and alarm relay output provide flexible connectivity options**



**Easy access to error codes and configuration information with a QR code**



**Replaces control units with single-room control**



**IP65 without additional protective casing**





## SX-ALPHA GAS DETECTOR

### ✓ Designed and manufactured in Finland

SX-Alpha is a modern and cost-effective gas detector designed and manufactured by Sensorex, the industry-leading gas monitoring equipment manufacturer, which introduces a new MPS technology for demanding LEL multi-gas detection. We offer Finnish expertise, reliability, and quality with nearly 50 years of experience.

### ✓ Smart sensor module reduces maintenance costs and increases reliability

A factory-calibrated smart sensor module allows sensor replacement without field calibration. This further increases detector accuracy, reduces maintenance costs, and improves reliability.

### ✓ RS-485 Modbus RTU, 4-20mA, and alarm relay output provide flexible connectivity options

Compatible with most common automation systems and all Sensorex gas control units.

### ✓ Replaces control units with single-room control

SX-Alpha's high-resolution OLED display, integrated status indicator and remote sensor support allow for easy and cost-effective single-room monitoring, eliminating the need for a separate control unit. In this setup SX-Alpha is placed outside the controlled area and only the remote sensor and the alarm beacon, siren (or combination) are installed in the controlled area. The remote sensor can be used for measuring light gases, in which case the sensor can be freely positioned, for example near the ceiling and the detector itself is accessible without ladders or scaffolding.

### ✓ Easy access to possible error codes and configuration information with a QR code

SX-Alpha allows you to easily read device configurations and error codes with a QR code generated by the device. You can either scan the QR code with your cell phone or take a picture of it and send it to the service center for diagnosis and troubleshooting.

### ✓ IP65 without additional protective casing

In demanding environments, detectors often require additional casing or protection to achieve the desired reliability. SX-Alpha offers IP65-level ingress protection by default without the need for separate casings or accessories. This is a significant advantage in terms of both purchase and installation costs and eases the maintenance and use of the equipment.



## TECHNICAL SPECIFICATIONS

# SX-ALPHA GAS DETECTOR

<b>Operating voltage</b>	12-38 VDC/12-27 VAC	<b>Size</b>	114 x 164 x 86 mm
<b>Power consumption</b>	Electrochemical ~ 2 W Catalytic ~ 2.5 W In cold conditions max. 7 W	<b>Weight</b>	0.6 kg
<b>Display</b>	OLED high contrast, white on black	<b>IP category</b>	IP65
<b>Status indicator</b>	Bright and visible - red, yellow, green	<b>Outputs</b>	4-20 mA Modbus RTU 1 x relay 8A/230VAC   5A/30VDC alarm/malfunction
<b>Lead-throughs</b>	2 cable gland Ø 4.5-10 mm		
<b>Standards</b>	EN 50270:2015/AC:2016		



## ACCESSORIES

### Remote sensor:

- 11594 SX-Alpha Remote sensor casing top cover anodized aluminum
- 11607 SX-Alpha Remote sensor ceiling bracket
- 11608 SX-Alpha Remote sensor wall bracket
- 11904 SX-Alpha Remote sensor cable with connectors 5 m
- 11905 SX-Alpha Remote sensor cable with connectors 10 m
- 11906 SX-Alpha Remote sensor cable with connectors 15 m
- 11907-[length]m SX-Alpha Remote sensor cable with connectors
- 11793 SX-Alpha Remote sensor cable without connectors (m)
- 11902 SX-Alpha Remote sensor connector kit

### Alarm devices:

- 40049 E2S L101H Alarm blinker LED, 24VDC red
- 40051 E2S SONF1 Sound alarm, 24VDC 103dB
- 40054 E2S SONFL1H Combination alarm, LED 24VDC red

### Signs:

- 11611 Sign GAS ALARM with warning triangle. 200 x 300 mm
- 11612 Sign GAS ALARM, 400 x 100 mm
- 11613 Sign GAS ALARM, 300 x 50 mm

### Other:

- 11616 Weather cover
- 11901 SX-Alpha Remote calibration adaptor

***Ask about other accessories!***

## SPARE PARTS

- 11872 SX-Alpha Gas detector without sensor module
- Sensor modules:
  - 11633 SX-Alpha sensor module CH<sub>4</sub> 0-100 %LEL
  - 11837 SX-Alpha sensor module O<sub>2</sub> 0-30%VOL
  - 11852 SX-Alpha sensor module C<sub>3</sub>H<sub>8</sub> 0-100 %LEL
  - 11853 SX-Alpha sensor module H<sub>2</sub> 0-100 %LEL
  - 11854 SX-Alpha sensor module C<sub>5</sub>H<sub>12</sub> 0-100 %LEL
  - 11855 SX-Alpha sensor module Gas:[Gas] 0-100 %LEL
  - 11868 SX-Alpha sensor module MPS 0-100 %LEL
  - 11880 SX-Alpha sensor module CO<sub>2</sub> 400-2000 ppm
  - 11882 SX-Alpha sensor module NH<sub>3</sub> 0-100 ppm
  - 11883 SX-Alpha sensor module NH<sub>3</sub> 0-1000 ppm
  - 11891 SX-Alpha sensor module CO 0-500 ppm
  - 11892 SX-Alpha sensor module H<sub>2</sub>S 0-100 ppm
  - 11924 SX-Alpha sensor module CO<sub>2</sub> 0.04-2 %VOL
  - 11595 SX-Alpha Sensor casing sinter
  - 11624 SX-Alpha Sensor casing (with sinter and seals)
  - 11796 SX-Alpha Battery CR2025



# FLAMMABLE GAS DETECTORS

**Measuring range: 0–100% LEL \***

**Ambient temperature and humidity ranges:**

Catalytic technology:      MPS™ technology:

• -40 ... +60°C

• -40 ... +60°C

- 0-95% RH

- 0-100% RH

Gas	Technology	Product code	Sensor life expectancy	Spare part product code
Butane C <sub>4</sub> H <sub>10</sub>	Catalytic	11861-C <sub>4</sub> H <sub>10</sub>	5 years	11855-C <sub>4</sub> H <sub>10</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Ethane C <sub>2</sub> H <sub>6</sub>	Catalytic	11861-C <sub>2</sub> H <sub>6</sub>	5 years	11855-C <sub>2</sub> H <sub>6</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Isobutane HC(CH <sub>3</sub> ) <sub>3</sub>	Catalytic	11861-HC(CH <sub>3</sub> ) <sub>3</sub>	5 years	11855-HC(CH <sub>3</sub> ) <sub>3</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Isobutylene (isobutylene/2-methylpropylene) C <sub>4</sub> H <sub>8</sub>	Catalytic	11861-C <sub>4</sub> H <sub>8</sub>	5 years	11855-C <sub>4</sub> H <sub>8</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Isopropanol (2-propanol/isopropyl alcohol) C <sub>3</sub> H <sub>8</sub> O	Catalytic	11861-C <sub>3</sub> H <sub>8</sub> O	5 years	11855-C <sub>3</sub> H <sub>8</sub> O
	MPS™ TrueLEL™	11867	15 years**	11868
Xylene C <sub>8</sub> H <sub>10</sub>	Catalytic	11861-C <sub>8</sub> H <sub>10</sub>	5 years	11855-C <sub>8</sub> H <sub>10</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Methane CH <sub>4</sub>	Catalytic	11622	5 years	11633
	MPS™ TrueLEL™	11867	15 years**	11868
Methyl ethyl ketone (MEK/2-butanone/methyl acetone/methyl propanone) C <sub>4</sub> H <sub>8</sub> O	Catalytic	11861-C <sub>4</sub> H <sub>8</sub> O	5 years	11855-C <sub>4</sub> H <sub>8</sub> O
Octane C <sub>8</sub> H <sub>18</sub>	Catalytic	11861-C <sub>8</sub> H <sub>18</sub>	5 years	11855-C <sub>8</sub> H <sub>18</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Pentane C <sub>5</sub> H <sub>12</sub>	Catalytic	11860	5 years	11854
	MPS™ TrueLEL™	11867	15 years**	11868
Propane C <sub>3</sub> H <sub>8</sub>	Catalytic	11857	5 years	11852
	MPS™ TrueLEL™	11867	15 years**	11868
Propene (propylene) C <sub>3</sub> H <sub>6</sub>	Catalytic	11861-C <sub>3</sub> H <sub>6</sub>	5 years	11855-C <sub>3</sub> H <sub>6</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Toluene C <sub>7</sub> H <sub>8</sub>	Catalytic	11861-C <sub>7</sub> H <sub>8</sub>	5 years	11855-C <sub>7</sub> H <sub>8</sub>
	MPS™ TrueLEL™	11867	15 years**	11868
Hydrogen H <sub>2</sub>	Catalytic	11858	5 years	11853
	MPS™ TrueLEL™	11867	15 years**	11868
<b>Other flammable gases and vapors</b> <i>(e.g. gasoline, diesel oil, ethanol, hexane, heptane, carbon monoxide, methanol, nonane, etc.)</i>	Catalytic	11865-[Gas]	5 years	11855-[Gas]

\*If you need a different measuring range, include the code 90031 in your order and specify the range.

\*\*under normal operating conditions

# OXYGEN AND TOXIC GAS DETECTORS

**Technology: electrochemical (EC) / infrared (IR)**

Gas	Product code	Measurement range (scale)	Sensor life expectancy and spare part product code		Ambient temperature and humidity ranges:	
					°C	% RH
Oxygen O <sub>2</sub> (EC)	11623	0-30% vol.	2 years	11837	-40 ... +50	5-95
Ammonia NH <sub>3</sub> (EC)	11884	0-100 ppm	2 years	11882	-40 ... +40	15-90
	11885	0-1000 ppm	2 years	11883	-40 ... +40	15-90
Carbon dioxide CO <sub>2</sub> (IR)	11894	400 (0)-2,000 ppm	10 years	11924	-40 ... +50	<85
	11923	0.04(0)-2%vol	10 years	11924	-40 ... +50	<85
Carbon monoxide CO (EC)	11896	0-500 ppm	4 years	11891	-40 ... +50	15-90
Hydrogen sulfide H <sub>2</sub> S (EC)	11898	0-100 ppm	4 years	11892	-40 ... +50	15-90

## Other gases:

Contact us: +358 2 434 0750 or [rfq@sensorex.fi](mailto:rfq@sensorex.fi)

\*If you need a different measuring range, include the code 90031 in your order and specify the range.







## GAS SAFETY EXPERTS

Professional gas monitoring protects against personal injuries, property damage and protects the environment from toxic spills and explosions. Uninterrupted, flexible, and cost-effective gas monitoring, considering the individual needs of our customers, are the key values of Sensorex Oy and to which we commit ourselves in our daily operations.

Sensorex Oy is the leading gas monitoring company in Finland and has been working for customers' gas safety since 1977. Our extensive range of services covers consulting, manufacturing, installation, and a comprehensive service network in Finland for the entire life cycle of gas control.



- **Established in 1977**
- **Manufacturing, development, and service organization in Finland**
- **Extensive range of services for the entire gas control life cycle**
- **Individual gas monitoring according to customer needs**
- **Cost-effective and flexible operating model**
- **We service Sensorex, Teledyne, Crowcon, WatchGas, MSA, Honeywell, Industrial Scientific, Dräger, and Detector equipment**

**SENSOREX OY**  
Karhutie 1  
21220 Raisio  
Finland

orders@sensorex.fi  
rfq@sensorex.fi  
service@sensorex.fi

Tel: +358 02 4340 750

[www.sensorex.fi](http://www.sensorex.fi)

