

Innovative Gas monitoring and control systems for saving energy in

UNDERGROUND CAR PARKS





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Smart gas monitoring systems.



KIMESSA AG

KIMESSA AG was established in 1985 as an innovator in the design and manufacture of electronic fixed gas detection solutions.

KIMESSA AG specialises in fixed gas monitoring and control systems, with customers drawn from industries including underground car parks, HVAC, laboratories, refrigeration, food and brewing.

KIMESSA AG has achieved worldwide notable success with their acclaimed carbon monoxide monitoring and control equipment in the underground car park market, designed to compliment specialist ventilation systems with some of the world's leading companies in this field.

All of our products are developed and manufactured in Switzerland. 50% of our output is exported through an experienced distributor network.

Certified to ISO 9001:2000 in 2004 and today to ISO 9001:2008, KIMESSA AG proves they are committed to meeting their customers demand for robust, high quality and innovative products.

KIMESSA-Products

- Swiss quality engineered products
- Free consulting and project design
- Proven competent and co-operative worldwide customer service
- Maintenance provided by dedicated and motivated personnel
- KIMESSA is committed to develop and innovate while maintaining a strict QC protocol combined with rigorous functional tests on each product
- KIMESSA Gas detection solutions represent 30 years experience in the market
- For more information, please consult our website or a distributor near you. **www.kimessa.com**





Today's society daily lives and works with poisonous, flammable and inert gases. Gas is an economical, functional and essential commodity, but one which can become dangerous if used or released in a noncontrolled manner.

Intensive research and development have led to the production of the compact KIMESSA gas monitoring system for industrial and domestic applications. With the CANline control units, and an extensive variety of Gas Detectors, KIMESSA is helping to prevent accidents and damage to people, homes and the workplace.

A gas monitoring system also actively promotes energy saving by monitoring and controlling the use of gas.

Thanks to the superior technical solutions they offer, KIMESSA gas monitoring systems are versatile, high quality and extremely cost-efficient. All products are subject to stringent quality control and are manufactured using innovative production and testing techniques.

KIMESSA and their representatives have more than 30 years of experience, and extensive technical knowledge to deliver the best in class guarantee when consulting, implementing and supporting your gas monitoring system.

Gas monitoring in:











Underground car parks Typical gases: CO, NO2

Refrigeration systems Typical gases: NH3, CO2, HFKW/HFCKW

Laboratories

Typical gases: O2, CO2, H2, CH4, C3H8

Gas heatings

Typical gases: CH4, C3H8

Industrial applications

Typical gases: HC, H2S, O2, Cl2, O3, CH4

Also:

- Workplace hygiene
- Chemical industry
- Power stations
- Beverage production
- Refrigeration systems
- Food industry
- Petro chemistry
- Water/Sewage water
- Cellulose/Paper industry



Gas monitor CANline 32+

Supply: 24 VDC (opt. 230 VAC) Sensor-Inputs: 4 x Analogue/ 32 x Digital (CAN-Bus) Output signal digital: Modbus RTU Switching output: 8 potential free (2A)



Main teatures:		
	Operating temperature:	-10 °C +40 °C
	Air humidity:	595 % (non condensing)
Specifications electronic		
	Supply:	24 VDC (opt. 230 VAC)
	Power consumption:	max. 60 mA
Specifications construction		
	Housing protection:	IP 54
	Material:	Thermoplast
	Weight:	1100 gr
Features		
	The CANline 32+ control unit displays the	
	detector gas concentration with name and location	

- The CANline 10 may be connected to a total of 32 analogue or digital sensors along with 6 off relay cards
- 3 CANline-Bus-Expander cards may be connected for an additional 3x32 digital sensors inputs giving a total of 128 sensors
- Maximum of 128 relays may be connected (6 Relay cards on the CANline 32+ and 3x6 relay cards on the CANline-Bus-Expander)
- 4 off 4-20mA detector inputs provided

Electronic and Dimensions

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I/O Connections 8 x pot. free relay contacts

MODBUS RTU-Interface Sensor-Inputs: 4 x 4...20 mA BUS 1-Connector for digital Sensor-Inputs, Touch-Display and Relay card BUS 2-Connector for 2. BUS-Line Connector for remote RESET **Supply** 24 VDC (below Power Supply) 230 VAC (0.9 Amp)



Gas sensor KSEC 504

for detection of Carbon Monoxide CO

Mesurement principle: Electrochemical **Output signal digital:** KIMESSA CANBUS **Position:** 1,5 meter from floor



Sensor specifications

Standard calibration:
Response time t 90:
Operating temperature:
Position sensitivity:
Long term output drift:
Life span at 20 °C:

Wiring digital: Supply: Power consumption:

once or twice a year.

Housing protection:

Material:

Weight:

0...300 ppm < 50 sec -10 °C ... +50 °C none < 5% signal loss/year > 5 years, depending on the application 4x 1,0 mm2, shielded 16.5...30 VDC

Specifications electronic

Inspection (Maintenance)

Specifications construction

Electronic and Dimensions



With cable glands: 120 mm



max. 20 mA

IP 32

600 g

Aluminum, RAL 5009

The sensor and the electronic require an inspection. Routine calibration is recommended

0.02-2.5 VDC 3.5 mm jack plug



Gas sensor KSEA 504

for detection of Carbon Monoxide CO

Mesurement principle: Electrochemical Output signal analogue: 4...20 mA Position: 1,5 meter from floor



Sensor specifications

Specifications electronic

Inspection (Maintenance)

Specifications construction

Standard calibration: Response time t 90: Operating temperature: Position sensitivity: Long term output drift: Life span at 20 °C:

Wiring analogue: Supply: Power consumption: 0...300 ppm < 50 sec -10 °C ... +50 °C none < 5% signal loss/year > 5 years, depending on the application

2x 0,75 mm2, shielded 13.5...30 VDC max. 60 mA

The sensor and the electronic require an inspection. Routine calibration is recommended once or twice a year.

Housing protection:	IP 65
Material:	rust-proof and acid-resistant steel, RAL
	5009
Weight:	410 g

Electronic and Dimensions



Connector for: - 4-20mA Signal - 24 VDC supply





Gas sensor KSEC 684

for detection of Nitrogen Dioxide NO2

Mesurement principle: Electrochemical Output signal digital: KIMESSA CANBUS Position: 30 cm from Floor



Sensor specifications

Specifications electronic

Inspection (Maintenance)

Specifications construction

Standard calibration: Response time t 90: Operating temperature: Position sensitivity: Long term output drift: Life span at 20 °C:

Wiring digital: Supply: Power consumption: 0...10/20/50/100 ppm < 25 sec -20 °C ... +50 °C none < 12% signal loss/year 4 years, depending on the application

4x 1,0 mm2, shielded 16.5...30 VDC max. 20 mA

The sensor and the electronic require an inspection. Routine calibration is recommended once or twice a year.

Housing protection:	IP 32
Material:	Aluminum,
	RAL 5009
Weight:	600 g





0.02-2.5 VDC 3.5 mm jack plug



Gas sensor KSEA 504/684

for detection of Carbon Monoxide/Nitrogen Dioxide CO/NO2

Mesurement principle: Electrochemical Output signal analogue: 2 x 4...20 mA/max. 60 mA Position: 1,5 meters from floor



Sensor specifications		
	Standard calibration:	CO: 0250 ppm / NO2: 010
	Response time t 90:	max. 60 sec
	Operating temperature:	-10 °C +50 °C
	Position sensitivity:	none
	Long term output drift:	2% signal loss/ month
	Life span at 20 °C:	CO: > 5 years
		NO2:>1 year
Specifications electronic		
	Wiring analogue:	3x 0,75 mm2, shielded
	Supply:	13.530 VDC
	Power consumption:	max. 60 mA
Inspection (Maintenance)		

The sensor and the electronic require an inspection. Routine calibration is recommended once or twice a year. The **calibration gas** should be 75% of the measurement range, and must contain synthetic air as the carrier gas.

Housing protection:	IP 65
Material:	rust-proof and acid-resistant steel, RAL 5009
Weight:	610 g
Tests:	CE



Specifications construction





LED-sign LW 1101/1102

Supply: 24 VDC

Main features:			
	Operating temperature:	-20 C+55 °C	
Specifications electronic			
	Wiring analogue:	2 x 0.75mm2	
	Supply:	24 VDC	
	Power consumption:	150 mA	
	Flash frequency:	none	
	Volume:	none	
Specifications construction			
	Housing protection:	IP 20	
	Material:	Housing made of powder-coated sheet	
	Weight:	1.8 / 2.8 kg	
Features			
	Enhanced visibility through 2-colour LED combination		
	 Simplified understanding by combining text/pictogram 		
	Can be combined with an external alarm horn		
	 Long service life due to LED technology (approx. 1,000 hours of operation) 		
	Text in verschiedenen Sprachen lieferbar		
	 Also available as a 2-sided version for ceiling installation (model LW 1102) 		
	Robust construction		
	Directly mounted on the wall		
	 Housing made of powder-coated sheet steel, grey RAL 7001 		
	Suitable only for indoor installation		
	 Options: Text and colours can be modified at the customer's request 		
	 Temperature range: -20+55 °C 		
Electronic and Dimensions			







Network connection:
 8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX, Auto-Negation





- KIMESSA CANBUS-Cable Li HCH: Cable 4x 1 mm², shielded, colored, max. 1200 m
- Modbus-RTU-Wiring: Cable 3x 0.75 mm², shielded, max. 1000 m
- Network connection:
 8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX, Auto-Negation



Management certificates



Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standard specified below.



Kimessa AG 8047 Zürich Switzerland

Certified area

Whole Company

Field of activity

Gas monitoring systems

Standard

ISO 9001:2008

Quality Management System

Swiss Association for Quality and Management Systems SQS Bernstrasse 103, CH-3052 Zollikofen Issue date: September 23, 2013

00 X. Edelmann, President SQS

This SQS Certificate is valid up to and including September 22, 2016 Scope numbers 18, 19 Registration number 30061

ser, CEO SQS

Swiss Made

Partner of





MITTEILUNG

über die Anerkennung der Qualitätssicherung Produktion

- Geräte und Schutzsysteme zur bestimmungsgemässen Verwendung (2) in explosionsgeschützten Bereichen - Richtlinie 94/9/EG
- Mitteilungsnummer: (3)

QS 15 ATEX 2123

(4)Gerät(e):

(1)

Herstellung und Vertrieb von Gasmessfühlern Typ GS.M ... Ex in der Zündschutzart druckfeste Kapselung "d"

- Die benannte Stelle führt eine Liste der EG-Baumusterprüfbescheinigungen, für die diese Mittei-(5)lung gilt.
- (6) Antragsteller: Kimessa AG Rautistrasse 12 8047 Zürich
- Kimessa AG Hersteller: (7)Rautistrasse 12 8047 Zürich
- Die QS Zürich AG, benannte Stelle Nr. 1254 für Anhang IV, nach Artikel 9 der Richtlinie des Ra-(8) tes der Europäischen Gemeinschaften vom 23. März 1994 (94/9/EG), teilt dem Antragsteller mit, dass er ein Qualitätssicherungssystem unterhält, welches den Anforderungen gemäss Anhang IV, Qualitätssicherung Produktion, der Richtlinie genügt.
- Diese Mitteilung basiert auf dem vertraulichen Auditbericht V-14.1620, ausgestellt am 23. Juli (9)2015. Die Mitteilung ist gültig bis zum 21. Juli 2018 und kann zurückgezogen werden, wenn der Hersteller die Anforderungen des Anhang IV nicht mehr erfüllt.

Die Ergebnisse der regelmässigen Begutachtung des Qualitätssicherungssystems sind Bestandteil dieser Mitteilung

Gemäss Artikel 10 (1) der Richtlinie 94/9/EG ist hinter der CE-Kennzeichnung die Kenn-Nummer (10)1254 von QS Zürich AG, der benannten Stelle des Herstellers anzugeben, die in der Produktionsüberwachungsphase tätig wird.

QS Zürich AG

Lukas Beljean

Zürich, 27. Juli 2015



Diese Bescheinigung darf nur vollständig, ohne Änderungen vervielfältigt werden. Bescheinigungen ohne Stempel und Unterschrift haben keine Gültigkeit.

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