



INDUSTRY

INOSENT the brand for
reliable gas detection systems.

INOSENT
GASWARNTÉCHNIK AG

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AREAS OF APPLICATION

INOSENT the brand for reliable gas detection systems.

In the workplace, gas detection systems are an indispensable safety asset across a spectrum of industrial processes. Consider the routine daily use of gases in heating and refrigeration equipment in addition to the dangerous gaseous produced from processes such as, fermentation, incineration, engine combustion to name but a few. These gases can be explosive or toxic as

well as colourless, odourless and tasteless. Gases and their presence in ambient air must therefore, be accurately and professionally monitored continuously on a 24-hour basis.

INOSENT offers you intelligent, comprehensive solutions within a wide scope of industrial applications. We will support you with constructive and competent advice so that you can plan for the highest levels of safety.

COOLING SYSTEMS



IN GENERAL, THE FOLLOWING
GASES WILL BE MONITORED:

(H)FKW | HFO | C₃H₈ | CO₂ | NH₃

WE RECOMMEND:

- INOSENT EASY
- INOSENT ULTIMATE

UNDERGROUND CAR PARK



IN GENERAL, THE FOLLOWING
GASES WILL BE MONITORED:

CARBON MONOXIDE CO
NITROGEN DIOXIDE NO₂

WE RECOMMEND:

- INOSENT COMPACT
- INOSENT ULTIMATE

GAS HEATING



IN GENERAL, THE FOLLOWING
GASES WILL BE MONITORED:

METHANE CH₄ | PROPANE C₃H₈

WE RECOMMEND:

- INOSENT CLASSIC

LABORATORY



IN GENERAL, THE FOLLOWING
GASES WILL BE MONITORED:

O₂ | CO | H₂ | CO₂ | NH₃ | C₃H₈
O₃ | SiH₄ | PH₃ | ECT.

WE RECOMMEND:

- INOSENT ULTIMATE

INDUSTRY ATEX ZONE 1 & 2 SIL 1 & SIL 2



IN GENERAL, THE FOLLOWING
GASES WILL BE MONITORED:

NH₃ | SOLVENTS | C₃H₈
CH₄ | H₂ | ECT.

WE RECOMMEND:

- INOSENT PREMIUM
- INOSENT ULTIMATE

PRODUCT LINES

EASY



A simple, very high-quality, stand-alone compact solution for small systems:

24 VDC/AC or 230 VAC | LED status display | 85 dB-Alarm Horn
2 Relay outputs | 4-20mA, 0-10VDC, Modbus RTU | IP 65 Protected

COMPACT



The ideal solution for monitoring CO and NO₂ as well as humidity in underground garages:

24 VDC | 16 BUS-Inputs for gas detectors and alarm lights | 4 x 4-20mA-Input | LCD-Display | 8 Digital outputs | Output 0-10VDC, Modbus RTU

CLASSIC



Efficient gas monitoring monitor in a wall-mounted housing for 2, 4 or 6 gas detectors:

24 V DC/AC or 230 VAC | 2, 4 or 6 x 4-20mA-Input | LCD-Display
4 Relay outputs | IP 65 Protected | incorporated data logger

ULTIMATE



A versatile, intelligent gas detection system with an innovative visual display of parameters on a touch screen:

24 VDC | 90 Inputs for gas detectors, alarm lights and accessories | 7" Touch-Display | USB/ RJ45-Connection | 8 Relay outputs, expandable
Modbus RTU/TCP outputs, optional 0-10VDC or 4-20mA

PREMIUM



A powerful, multi-functional gas detection system specially designed for SIL1 or SIL2 systems:

24 VDC | 256 Inputs for gas detectors (BUS or 4-20mA)
LCD-Display | 8 Relay outputs, expandable | 19"-Rack or metal box
incorporated data logger

PORTABLE



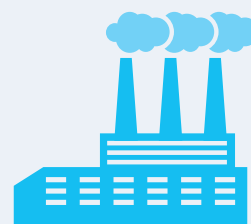
Blackline Safety: Wide range of gas sensors and accessories.
Alarm forwarding with location information by e-mail and SMS.

Riken Keiki: Mobile single-gas and multi-gas devices, extremely robust, smallest and lightest five-gas meter in the world.



INDUSTRY

In industrial workplaces, gases are omnipresent. To protect personnel and plant, the endangered areas must always be carefully monitored as dangerous concentrations of gas can arise at any time. Gas leaks caused by wear and vibration present a clear. The danger can be mitigated by using the correct gas detection system.



INOSENT RECOMMENDS THE «**ULTIMATE**» PRODUCT LINE FOR INDUSTRIAL USE.

With the «**ULTIMATE**» system, gas leaks can be detected at an early stage and dangerous concentrations of gas prevented: In addition to optical and acoustical alarms, the gas flow will be shut off, utilising a solenoid valve. Visual presentation of the gas detectors, measured gas values and alarm status are presented on the Ultimate touch screen, achieving an excellent overview over the events and measurement data. Logging of the gas concentrations, alarms and malfunctions, as well as a web server and a Modbus RTU output for communication with the

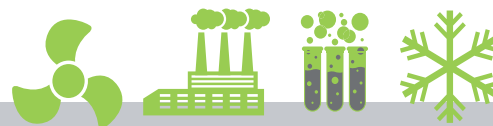
building control system, are all integrated into the system.

The gas detectors are available both with and without display and can also be delivered in a steel housing. The detectors can be used for ATEX explosion zones 1 and 2 and for the highest security requirements you can use our gas detectors which fulfil SIL2 requirements (Premium product line). For fast checking of gas monitoring data, suitable displays can be set up outside the Ex rated zone.

EASY TO INTEGRATE, WITH AN IDEAL DESIGN FOR INDUSTRY:
THE «**ULTIMATE**» PRODUCT LINE



- RELIABLE MONITORING OF VARIOUS GASES, SUCH AS CARBON MONOXIDE CARBON DIOXIDE, HYDROGEN SULPHIDE, PROPANE, AMMONIA, PROPANE, AND MANY MORE.
- ULTIMATE CONTROL PANEL
- GAS DETECTORS FOR MONITORING O₂, CO, H₂, CO₂, NH₃, C₃H₈, O₃, SiH₄, PH₃, H₂S; OTHERS CAN BE CONNECTED
- LED-LIGHT WITH INTEGRATED ALARM HORN
- FLASHING LIGHT
- ALARM HORN



INOSENT ULTIMATE WITHOUT DIGITAL ALARM UNITS

SIGNAL:

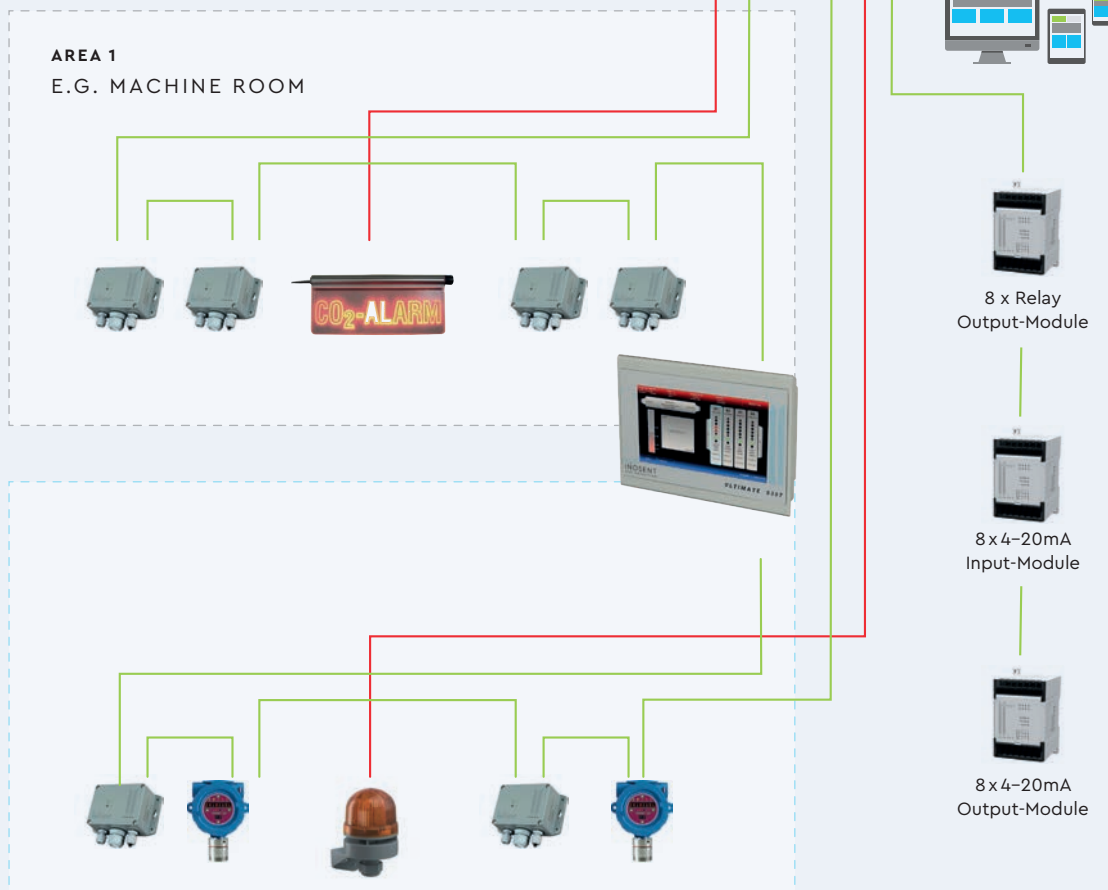
MODBUS

MAX. QUANTITY GAS DETECTORS:

90



- SUPPLY TO ALARM UNITS
24 VDC or 230 VAC
- SUPPLY TO GAS DETECTORS:
INOSENT MODBUS-CABLE LI HCH:
Cable $2 \times 2 \times 0,75 \text{ mm}^2$, shielded, coloured,
max. 1200 m
- ETHERNET-CONNECTION:
8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX,
Auto-Negation





INOSENT ULTIMATE WITH DIGITAL ALARM UNITS

SIGNAL:

MODBUS

MAX. QUANTITY GAS DETECTORS:

90



SUPPLY TO GAS DETECTORS AND ALARM UNITS:
INOSENT MODBUS-CABLE LI HCH:

Cable $2 \times 2 \times 0,75 \text{ mm}^2$, shielded, colored,
max. 1200 m

ETHERNET-CONNECTION:

8-pin RJ45, 10/100 Mbps, Auto MDI/MDIX,
Auto-Negotiation

AREA 1

E.G. MACHINE ROOM



AREA 2

E.G. REFRIGERATION PLANT





ULTIMATE 5307

The Ultimate product line has been designed specifically for monitoring the concentration of gases. The gas monitor has an integrated 7-inch touch screen for the graphical display, for operation and for programming. In addition, logging of gas concentration levels, alarms and malfunctions, as well as a web server and a MODBUS RTU output for communication with the building control system, are all integrated into the Ultimate system.



OVERVIEW:

- 2 YEARS WARRANTY
- PRACTICAL BUILT-IN INSTALLATION
- 7-INCH TOUCH-SCREEN DISPLAY
- ADDITIONAL TOUCH DISPLAYS CAN BE CONNECTED ON THE SAME BUS
- SIMPLE PROGRAMMING DIRECTLY ON THE TOUCH-SCREEN
- UP TO 50 BUS COMPONENTS
- EMBEDDED WEB SERVER
- INTEGRATED LOGGING OF GAS CONCENTRATIONS, ALARMS AND MALFUNCTIONS
- DISPLAY OF MEASURING RANGES, ALARM LEVELS AND ALARM GROUPS
- MAK VALUE MODE FOR NATIONAL DIRECTIVE-COMPLIANT LABORATORY MONITORINGS

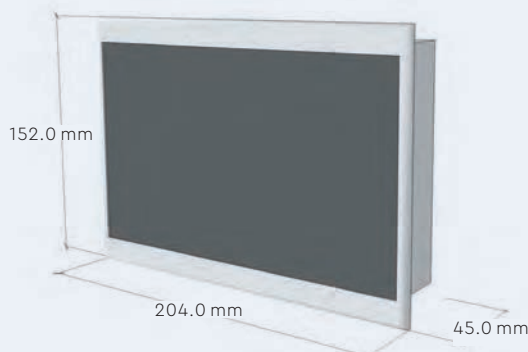
TECHNICAL SPECIFICATIONS

SUPPLY VOLTAGE: 24 VDC | Status display for operation and malfunctions on a well-organised colour display | USB- and SD-Card-interface | RJ-45 connector for the web viewer |

DIGITAL SIGNAL INPUT: 90 x digital via RS485 BUS-ports | 8 external relay contacts on the expansion module | 8 x 4-20mA analogue signal inputs on the expansion module |

AVAILABLE ACCESSORIES: Modbus-enabled LED alarm light with integrated horn, Expansion modules for additional relay outputs or analogue inputs

DIMENSIONS AND CONNECTIONS



RELAY OUTPUT MODULE TYPE I7110-8R

The Modbus I7110-8R relay output module controls eight independent electromagnetic relays according to incoming digital data:

- 8 output relays 4A 250 VAC OR 24 VDC
- Universal 230 VAC / 24 VDC power supply
- RS485 Modbus RTU-Interface
- DIN-rail or wall mount



RELAY OUTPUT MODULE (SPECIFICATIONS)

SUPPLY VOLTAGE: 90...264 VAC/ 20...375 VDC

POWER CONSUMPTION : <6 VA

WIRING: 2×2×0,75 mm², shielded

NUMBER OF OUTPUTS: 8

OUTPUT TYPE : Electromagnetic relay, 4A 250 VAC or 24 VDC

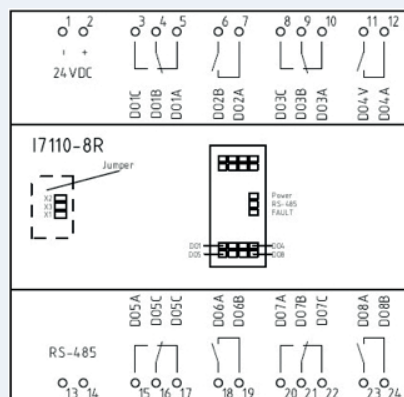
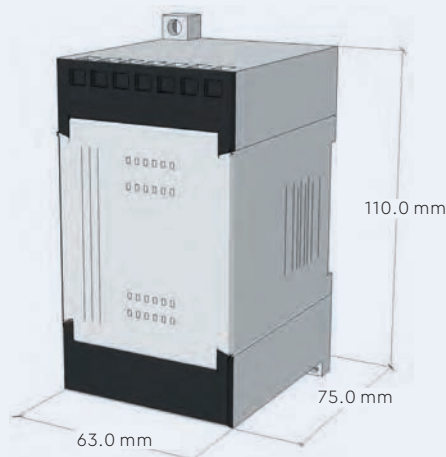
PROTECTION CLASS: IP 20

OPERATING CONDITIONS: -10...+55 °C, < 80 % RH

WEIGHT: 400 gr

CERTIFICATIONS: CE

DIMENSIONS AND CONNECTIONS



OVERVIEW OF AVAILABLE GAS DETECTORS PRODUCT LINE «EASY»

I2608-NH ₃ -E	NH ₃	Ammonia	0-100/300/1000 PPM
I2608-NH ₃ -S	NH ₃	Ammonia	0-1000 PPM
I2608-C ₂ H ₂ -S	C ₂ H ₂	Acetylen	0-100 % UEG
I2608-C ₄ H ₁₀ -S	C ₄ H ₁₀	Butane	0-100 % UEG
I2608-CO ₂ -I	CO ₂	Carbon dioxide	0-5000/10'000/50'000 PPM
I2608-CO-E	CO	Carbon monoxide	0-300 PPM
I2608-Cl ₂ -E	Cl ₂	Chlorine	0-20 PPM
I2608-C ₂ H ₄ -E	C ₂ H ₄	Ethylen	0-10/200/1500 PPM
I2608-C ₂ H ₄ -S	C ₂ H ₄	Ethylene	0-100 % UEG
I2608-ETO-E	ETO	Ethylene oxyde	0-20/100 PPM
I2608-HFC-S	HFC	Freon	0-1000 PPM
I2608-H ₂ -S	H ₂	Hydrogen	0-100 % UEG
I2608-H ₂ S-E	H ₂ S	Hydrogen sulfide	0-50/100/1000 PPM
I2608-CH ₄ -S	CH ₄	Methane	0-100 % UEG
I2608-CH ₄ -P	CH ₄	Methane	0-100 % UEG
I2608-NO-E	NO	Nitric oxide	0-30 PPM
I2608-NO ₂ -E	NO ₂	Nitrogen dioxide	0-20 PPM
I2608-O ₂ -E	O ₂	Oxygen	0-25 VOL. %
I2608-O ₃ -E	O ₃	Ozone	0-5 PPM
I2608-C ₃ H ₈ -S	C ₃ H ₈	Propane	0-100 % UEG
I2608-C ₃ H ₈ -P	C ₃ H ₈	Propane	0-100 % UEG
I2608-SO ₂ -E	SO ₂	Sulfur dioxide	0-50/100 PPM
I2608-VOC-S	VOC	VOC	0-100 % UEG

PROPANE-SMART-DETECTOR S2157PR FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



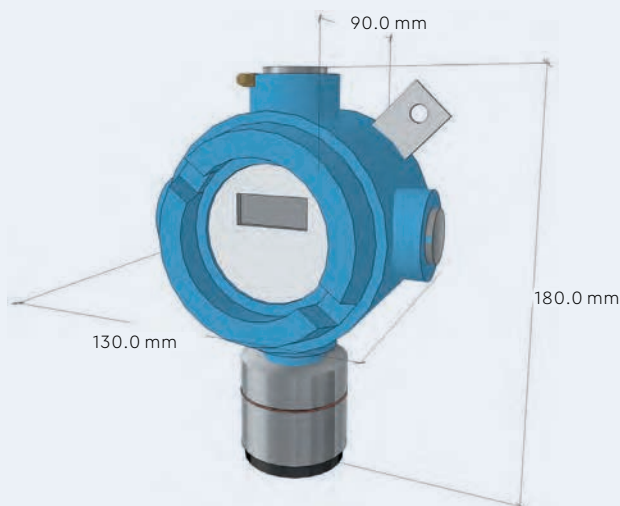
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0.75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL
ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t 90: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

PROPANE-SMART-DETECTOR S2097PR FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



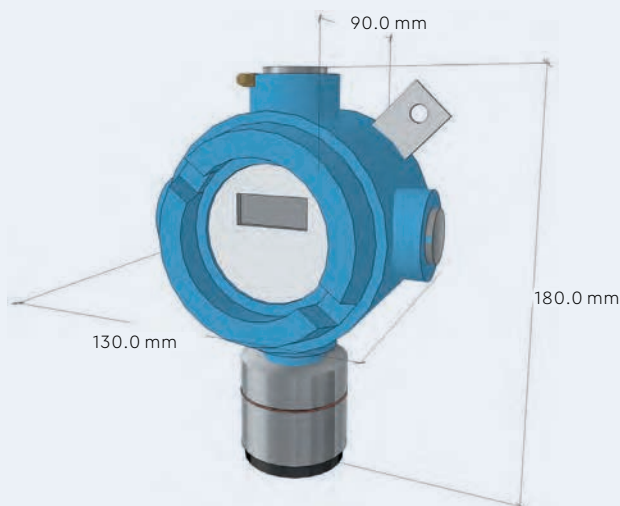
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0.75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL
ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t 90: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

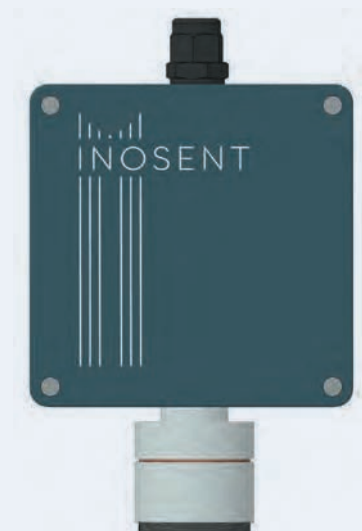
PROPANE-DETECTOR I2096PR FOR EX-ZONE 2

Designed to meet with light industrial requirements, the I2096PR gas detectors allows monitoring flammable contents in areas classified as zone 2, category 3.

Ideal in light industrial environments the gas detector feature one man calibration via calibration keypad.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors.

As an option the gas detectors is also available with a display.



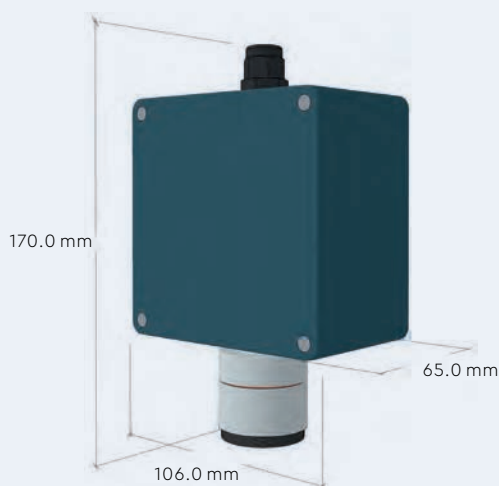
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3×0,75 mm² up to 100 m, shielded, 2×2×0.75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 850...1200 gr | **ATEX CERTIFIED FOR:** II 3G

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL C₃H₈ | **ACCURACY:** +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 6 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

AMMONIA SULPHIDE-SMART-DETECTOR S3227AM FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



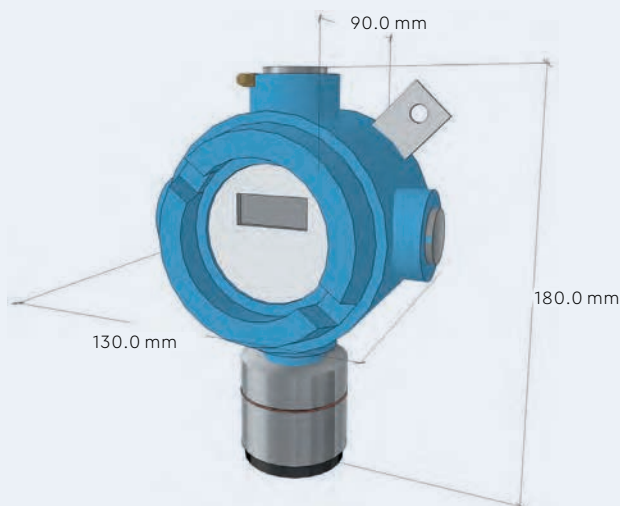
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 70 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 850...1200 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Electrochemical | **MEASURING RANGE:** 0...100 ppm (Type S2167AM 0...1'000 ppm) | **ACCURACY:** +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -20 °C ...+50 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 2 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	BUS A	BUS B	0VDC	+ Analog	S Analog
2	3	4	5	6	
Ex-Gas Detector					

AMMONIA SULPHIDE-SMART-DETECTOR S2097AM FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



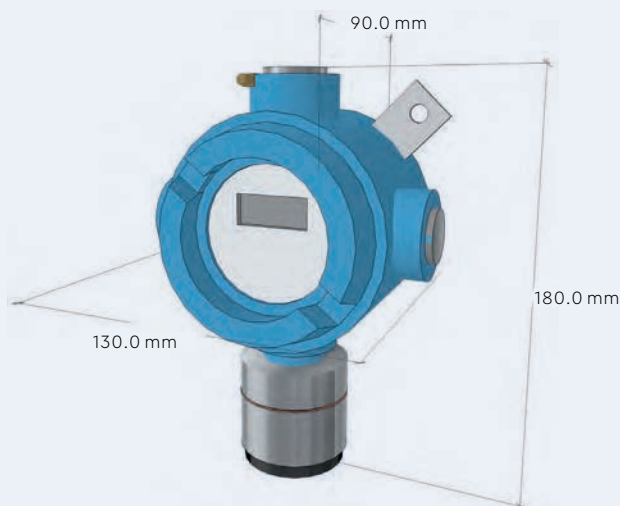
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 70 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 850...1200 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Electrochemical | **MEASURING RANGE:** 0...100 ppm (Type S2167AM 0...1'000 ppm) | **ACCURACY:** +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -20 °C ...+50 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 2 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

AMMONIA-DETECTOR I3224AM FOR EX-ZONE 2

Designed to meet with light industrial requirements, the I3224AM gas detectors allows monitoring flammable contents in areas classified as zone 2, category 3.

Ideal in light industrial environments the gas detector feature one man calibration via calibration keypad.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors.

As an option the gas detectors is also available with a display.



SPECIFICATIONS ELECTRONICS

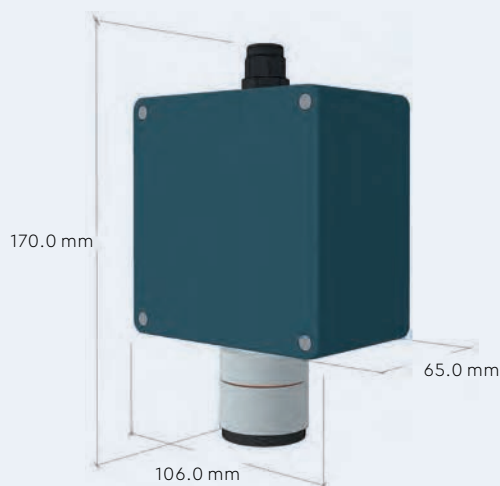
SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 70 mA | **WIRING ANALOGUE/DIGITAL:** 3×0,75 mm² up to 100 m, shielded, 2×2×0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 850...1200 gr | **ATEX CERTIFIED FOR:** II 3G

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Electrochemical | **MEASURING RANGE:** 0...100 ppm (Type I2132AM 0...200 ppm/ Type I2134AM 0...1'000 ppm) | **ACCURACY:** +/- 2 % of measuring range

RESPONSE TIME: t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -20 °C ...+50 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 2 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

METHANE-SMART-DETECTOR S2157ME FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



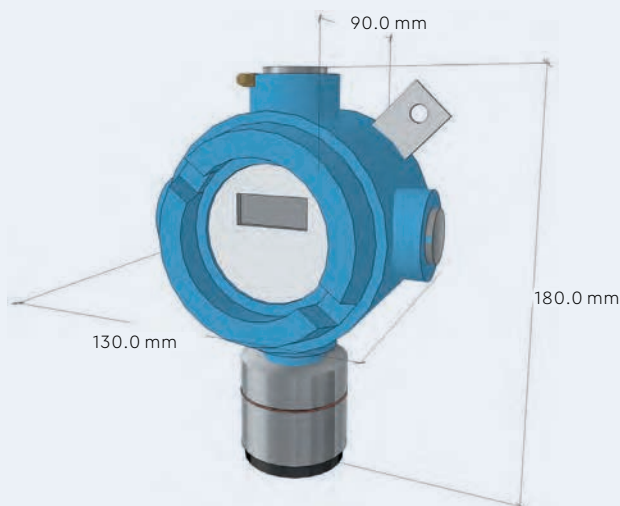
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0.75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL CH₄ | **ACCURACY:** +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

METHANE-SMART-DETECTOR S2097ME FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



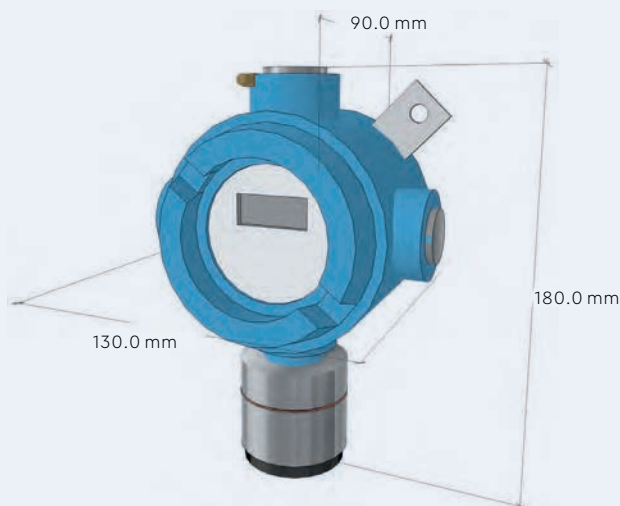
SPECIFICATIONS ELECTRONICS

SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0.75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL CH₄
ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t 90: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

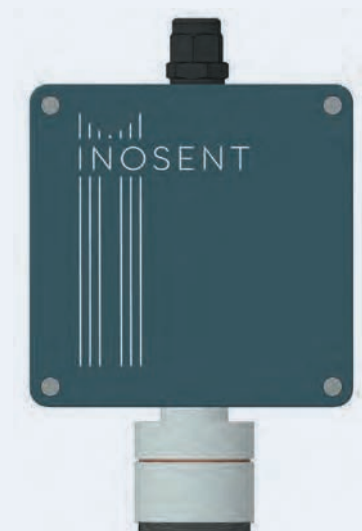
METHANE-DETECTOR I2096ME FOR EX-ZONE 2

Designed to meet with light industrial requirements, the I2096ME gas detectors allows monitoring flammable contents in areas classified as zone 2, category 3.

Ideal in light industrial environments the gas detector feature one man calibration via calibration keypad.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors.

As an option the gas detectors is also available with a display.



SPECIFICATIONS ELECTRONICS

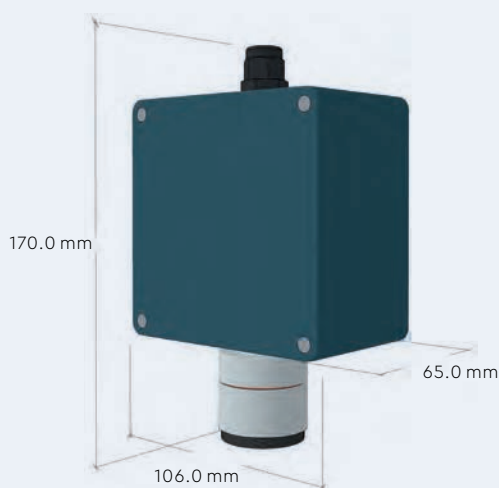
SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 130 mA | **WIRING ANALOGUE/DIGITAL:** 3×0,75 mm² up to 100 m, shielded, 2×2×0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 850...1200 gr | **ATEX CERTIFIED FOR:** II 3G

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL CH₄

ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 6 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



○	○	○	○	○	○
24VDC Bus1	BUS A 2	BUS B 3	0VDC 4	+ Analog 5	S Analog 6
Ex-Gas Detector					

HYDROGEN-SMART-DETECTOR S2157H2 FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



SPECIFICATIONS ELECTRONICS

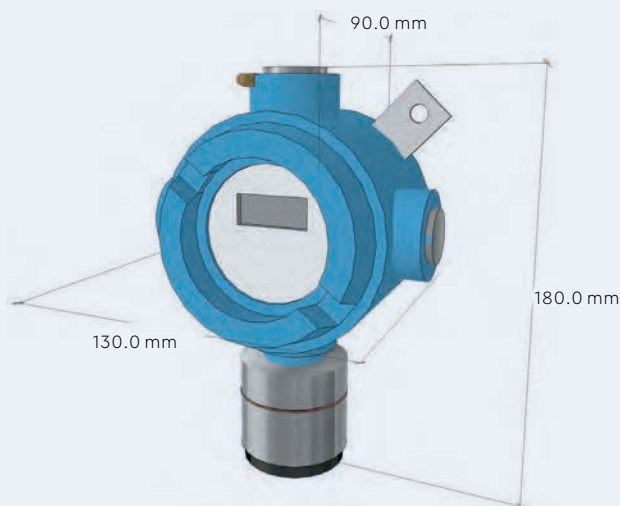
SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 70 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL H₂

ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

HYDROGEN-SMART-DETECTOR S2097H2 FOR EX-ZONE 1

Designed to meet with tough industrial requirements, the Smart-Detector allow monitoring toxic and flammable contents in harsh environments and classified areas.

They offer a 4-digit back-light display and 5 mode status LED for the gas concentration reading. Ideal in harsh environments, the Smart-Detector feature non intrusive calibration for an accurate and easy adjustment via Hall-effect switches, without opening the instrument and declassifying the area.

The detectors is IP65 protected and SIL2 Hardware tested (not certified) and provides a simple concept to replace sensors. As an option the gas detectors is also available without a display.



SPECIFICATIONS ELECTRONICS

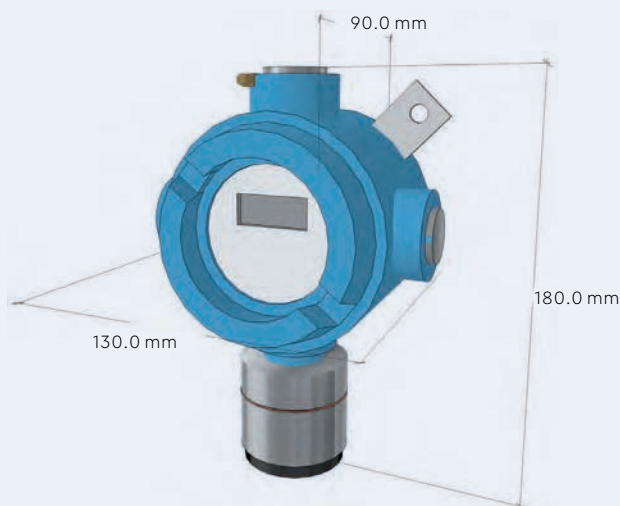
SUPPLY: 24 VDC | **POWER CONSUMPTION:** max. 70 mA | **WIRING ANALOGUE/DIGITAL:** 3x0,75 mm² up to 100 m, shielded, 2x2x0,75 mm², shielded | **SIGNAL-OUTPUT ANALOGUE/DIGITAL:** 4...20 mA, Modbus RTU | **OPTIONAL RELAY OUTPUTS:** 1 or 3 | **WEIGHT:** 950...1700 gr | **ATEX CERTIFIED FOR:** Group II 2G (ATEX II2G Ex d IIC T6), 2GD, 3G & GD and for Group I M2 (with larger enclosure)

SPECIFICATIONS SENSOR

MEASURING PRINCIPLE: Pellistor | **MEASURING RANGE:** 0...100 % LEL H₂

ACCURACY: +/- 2 % of measuring range | **RESPONSE TIME:** t₉₀: < 30 sec | **OPERATION TEMPERATURE:** -40 °C ...+60 °C | **HUMIDITY:** 20...90 % (non condensing) | **APPROX. LIFETIME AT 20°C:** > 5 years, depending on application | **CALIBRATION:** It is necessary to inspect the gas detector every 3 month and to recalibrate it only if needed.

DIMENSIONS AND CONNECTIONS



24VDC Bus1	2	3	4	5	6
BUS A	BUS B	0VDC	+ Analog	S Analog	
Ex-Gas Detector					

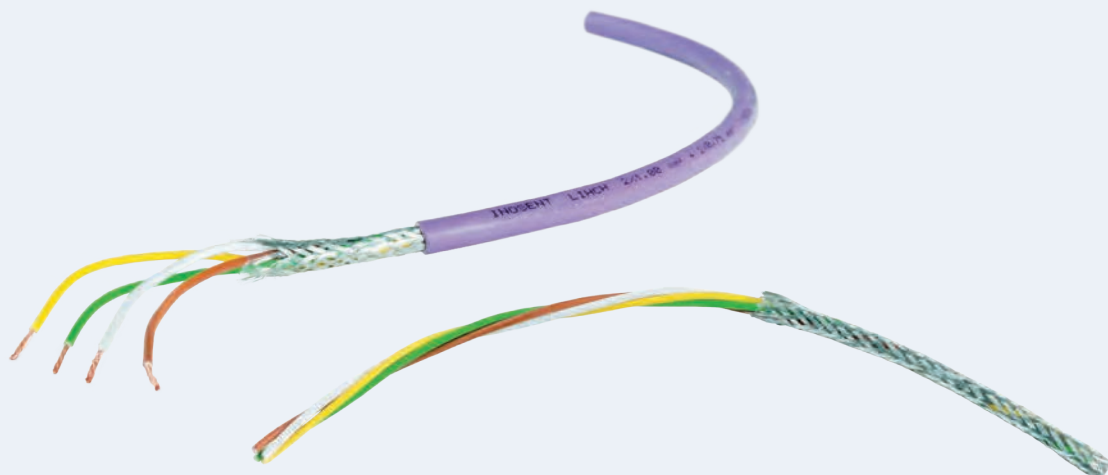
INOSENT MODBUS-CABLE 2 x 1 MM² / 2 x 0.75 MM² IMK 21275

The INOSENT Modbus-cable IMK 21275 was designed for our BUS system. The colored cores allow easy and correct connection of the components.

The shield and the paired wires protect our data cable from external influences. Our cable meets the fire protection class CPR B2ca and is halogen-free



CABLE TYP:	IMK 21275
OUTSIDE DIAMETER:	7.80 mm
OUTHER SHEATH:	violet, halogen-free, shielded
CORES:	twisted in pairs halogen free
POWER SUPPLY CROSS-SECTION:	2 x 1 mm ²
COLOURS POWER SUPPLY:	Brown = V- / White = V+
DATA CABLE CROSS-SECTION:	2 x 0.75 mm ²
SUPPLY COLOURS:	Green = A / Yellow = B
FIRE PROTECTION CLASS:	CPR B2ca



CONTACT

INOSENT IS THERE FOR YOU

Regardless of the reason for your interest in the area of gas detection technology: Contact us and we will do our best to find the optimum solution for you.

We will be happy to go into detail with you and address your specific ideas and concerns – because you can always depend on INOSENT.

INOSENT Gaswarntechnik AG

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