

# ATEX GAS MEASURING SYSTEM

## 1. PROPERTIES

The gas measuring system is approved for operation in zone 1 and zone 2 hazardous areas and has an EU-type examination certificate in accordance with Directive 94/9/EC (ATEX) with the following certificate and labelling:

IBExU 12 ATEX 1080 X

II 2G Ex de IIC T6/T4 Gb

Ambient temperature range:

T4: -40°C to +60°C / T6: -40°C to +50°C



The modular design of the sensor allows it to be equipped with a catalytic sensor (pellistor) for determining the concentration of explosive gases and vapours, or with an electrochemical sensor for toxic gases depending on the variant. The concentration is output from the 4-20mA interface, for further processing.

## 2. GAS CALIBRATION OPTIONS

The measuring ranges depend on the measured gas or vapour. Please refer to the calibration options below. Other gases, vapours and concentrations may be available on request.

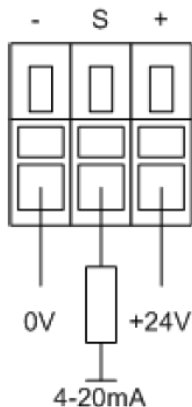
•Hydrogen	LEL 4.0% volume, measuring range 0 – 100% LEL
•Methane	LEL 4.4% volume, measuring range 0 – 100% LEL
•Propane	LEL 1.7% volume, measuring range 0 – 100% LEL
•n-Butane	LEL 1.4% volume, measuring range 0 – 100% LEL
•LPG (50%-50%)	LEL 1.5% volume, measuring range 0 – 100% LEL
•Ethanol	LEL 3.1% volume, measuring range 0 – 100% LEL
•Methanol	LEL 6.0% volume, measuring range 0 – 100% LEL
•i-Propanol	LEL 2.0% volume, measuring range 0 – 100% LEL
•Xylol	LEL 1.0% volume, measuring range 0 – 100% LEL
•n-Heptane	LEL 0.8% volume, measuring range 0 – 100% LEL
•Acetylene	LEL 2.9% volume, measuring range 0 – 100% LEL
•Carbon Monoxide	measuring range 0 – 300ppm CO
•Oxygen	measuring range 0 – 25% volume O <sub>2</sub>



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## 3. TECHNICAL DATA

<b>Principle of Measurement:</b>	Catalytic (pellistor) or electrochemical sensor
<b>Power Supply:</b>	Voltage: 18 V to 30 V DC Current: approx. 105mA at 24V
<b>Ambient Temperature:</b>	-40°C to +60°C for temperature class T4 -40°C to +50°C for temperature class T6
<b>Air pressure:</b>	700 hPa to 1300 hPa
<b>Permissible Humidity:</b>	10 to 95% humidity non-condensing
<b>Output:</b>	4-20mA max. Load 500 $\Omega$ , Error status at I
<b>Housing:</b>	Alloy composition/Stainless steel Protection class: IP 65 Weight: ca. 1100g Dimensions (D x H): ca. $\varnothing$ 84xH78mm
<b>Connecting Cable:</b>	3-wire shielded cable Recommended cable cross-section minimum 1.5mm <sup>2</sup>
<b>Certification:</b>	EC-type examination certificate in accordance with the directive 94/9 / EC (ATEX) IBExU 12 ATEX 1080 X EX II 2G Ex de IIC T6/T4 Gb
<b>Part no:</b>	2112B42021
<b>Pin Assignment:</b>	



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## 4. CERTIFICATIONS

The device has been approved in accordance with the directive 94/9/EC (ATEX) with the examination certificate type IBExU 12 ATEX 1080 X. It was tested according to the standards EN 61000-6-2, EN 61000-6-3 and EN 50270 and complies with the EMC Directive 2004/108/EC.

## 5. MAINTENANCE AND SERVICE

The device is delivered already calibrated. The maintenance cycle should correspond to the given safety requirements of the application and the country of use. We recommend at least a semi-annual inspection of the equipment by qualified personnel.

The data contained in this document is believed to be accurate and reliable. The data given is for guidance only. Euro-Gas Management Services Ltd accepts no liability for any consequential losses, injury or damage resulting from the use of this datasheet or the information contained in it. Customers should test the sensors under their own conditions to ensure that the sensors are suitable for their own requirements and in accordance with the plans and circumstances of the specific project and any standards/regulations pertaining to the country in which the sensors will be utilised. This datasheet is not intended to form the basis of a contract and in the interest of product improvement, Euro-Gas reserves the right to alter design features and specifications without notice. 07/16

