

# GaSis-Ex01

Industrial Measuring Device

**LPG**

**METHANE**

**BUTANE**

**PROPANE**

**AMMONIA**

**HYDROGEN**

**HYDROGEN SULFIDE**

**CARBONMONOXIDE**

**Toxic and Explosive Gas Detection**

**4-20mA Analog Output**

**ATEX Documents**

**RS485 RTU Modbus Output**

**Relay Output**

**Fault (Error) Output**

**Aluminum trunk**

**Flameproof Enclosure**

**IP65 Protection**

**Zone1 and Zone2**



**Sismik® A.Ş.**

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# “Industrial Heavy Type Ex-proof Gas Measuring Devices”

## GENERAL FEATURES

- Seismic gas measuring devices; Catalytic, electrochemical and Pellistor sensors It can detect toxic, flammable and explosive gas types.
- The design and structure of the trunk and sensor head of the seismic gas measurement device allow the measurement devices to be used in non-hazardous areas in addition to hazardous environments.
- The relay outputs on the gas measuring device are : alarm and error ; It provides the opportunity to control Siren, external devices such as valves and switches.
- Gas measuring device with power supply with 2A output between 12VDC and 24VDC It is powered and produces an industry standard 4-20mA analog current output.
- In this way, the Detector can be connected to control panels with 4-20mA analog current input. can be connected and communicated with these panels.
- Seismic gas measuring devices have ATEX certificate and are fully functional in hazardous environments, provides protection.
- It produces analog current output between 4-20mA according to the amount of gas they detect on seismic gas measuring devices.
- Alarm relay will be active in case of alarm and There are fault relay outputs it will be active in case of sensor failure(Error).
- By connecting the 4-20mA analog current output on the measuring device to the seismic control panels or the panels with 4-20mA analog current input, the amount of gas detected by the device can be monitored on these panels.
- 4-20mA outputs of the measuring device; Information about initial start-up, calibration or error status can also be obtained.
- There is also a communication structure with RS485 Modbus RTU protocol to be used when necessary.

## PRODUCT TYPES

GAS TYPE	SENSOR TYPE	MEASUREMENT RANGE
METHANE	PELISTOR	0-100%LEL
LPG	PELISTOR	0-100%LEL
BUTANE	PELISTOR	0-100%LEL
PROPANE	PELISTOR	0-100%LEL
HYDROGEN	PELISTOR	0-100%LEL
HYDROGEN SULFIDE	ELECTRO-CHEMICAL	0-100 PPM
AMMONIA	ELECTRO-CHEMICAL	0-100 PPM
CARBONMONOXIDE	ELECTRO-CHEMICAL	0-1000 PPM

## CALIBRATION

- Since there will be shifts in the gas sensor's perceptions over time, Seismic company recommends that the gas measuring devices be calibrated periodically.
- Our company recommends calibrating Electrochemical gas measuring devices every 3-6 months, and Pellistor type gas measuring devices every 3 months.
- Gas measuring devices may need to be calibrated in a shorter time depending on the environment in which they are used.
- Gas measuring devices have 2 calibration modes, First and Gas.
- How these calibrations are done is explained in detail in the user manuals.

## TECHNICAL SPECIFICATIONS

Supply Voltage and Current	: 12 – 24VDC 2A
Maximum Power Consumption	: 4W
Analog Current Output	: 4-20mA
Analog Current Output in Fault	: 1mA
Analog Current Output at Startup	: 3mA
Analog Current Output in Calibration Process	: 2mA
Analog Current Output in Normal Gauge Process	: 4-20mA
Above Measuring Range	: >21mA
Feed Entry Point	: 12-24VDC ve GND
4-20mA Analog Output Point	: 4-20mA ve GND
Alarm Output Points	: NO - C - NC Contact Terminals
Fault (Error) Exit Point	: NO - C - NC Contact Terminals
Relay Output Capacities (NO)	: 10A 125V AC, 5A 250V AC, 5A 30V DC
Relay Output Capacities (NC)	: 3A 125V AC, 2A 250V AC, 1A 30VDC
Communication	: RS485, Modbus RTU
Sensor Life	: Average 2 Years
Weight	: 1050 gr
Dimensions	: 205x121x69mm
Material Type	: Aluminum
Usage areas	: Zone1, Zone2
Mounting Position	: Wall Mount
Cable Entries	: ½ NPT Cable entry, ¾ NPT sensor head entry
IP Class	: IP65
Operating temperature	: -20°C - +60°C
Humidity Range	: <95% RH
Operating pressure	: 85-110 KPa
Storage Conditions	: -20°C - +60°C
ATEX Label Information	: II 2G Ex db IIB+H2 T6 Gb IP6

## ALARM LEVELS

GAS TYPE	ÖLÇÜM ARALIĞI	ALARM SEVİYESİ
METHANE	0-100%LEL	20%LEL
LPG	0-100%LEL	20%LEL
BUTANE	0-100%LEL	20%LEL
PROPANE	0-100%LEL	20%LEL
HYDROGEN	0-100%LEL	20%LEL
HYDROGEN SULFIDE	0-100 PPM	10 PPM
AMMONIA	0-100 PPM	35 PPM
CARBONMONOXIDE	0-1000 PPM	100 PPM

## MOUNTING POSITIONS

GAS TYPE	MOUNTING POSITIONS
METHANE	30 cm DOWN FROM THE CEILING
LPG	30 cm UP FROM FLOOR
BUTANE	30 cm UP FROM FLOOR
PROPANE	30 cm UP FROM FLOOR
HYDROGEN	30 cm DOWN FROM THE CEILING
HYDROGEN SULFIDE	150 cm UP FROM FLOOR
AMMONIA	30 cm DOWN FROM THE CEILING
CARBONMONOXIDE	150 cm UP FROM FLOOR

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