

(1) EU-TYPE EXAMINATION CERTIFICATE

(2) **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014**

(3) EU-Type Examination

Certificate No.:

KSCP 24ATEX0033U, Issue: 1

(4) Product:

**Ultra-low Power Infrared Gas Sensor
MIPEX-04-X-XX-3.5**

(5) Manufacturer:

MGS TECHNOLOGY DOO

(6) Address:

**Bulevar Patrijarha Germana 91, Beli Potok, 11223
Belgrade, Republic of Serbia**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KSC POLAND Sp. z o.o., Notified Body number 2877, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **KSCP/AR/24/Q00426**

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-11:2012

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confused with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems. "Schedule of limitations" is listed under item 17 of this certificate.

(11) This EU – Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

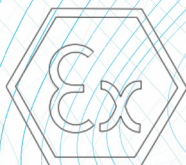
(12) The marking of the product shall include the following:



**I M1 Ex ia I Ma
II 1G Ex ia IIC Ga**


Signature

In the name of Notified Body



Katowice, 8th July, 2026



(13)

SCHEDULE

(14)

CERTIFICATE No.: KSCP 24ATEX0033U, Issue:1

(15) Description:

The Ultra-low Power Infrared Gas Sensor MIPEX-04-X-XX-3.5 is a smart integrated system and includes mirror optical system, photodiode and LED, signal amplifiers, microcontroller, current driver of the infrared LED, UART interface signal generator and forming voltage supply unit. Sensor microcontroller performs storage of unique sensor calibration constants, processing of measurement results and concentration of measured gas, and information exchange. Sensor operating principle is based on NDIR technology, i.e. on selective infrared radiation absorption by gas molecules.

Type explanation:

MIPEX	-04	-X	-XX	-3	.5
	I	II	III	IV	V

I : MIPEX Model number

II: Target gas:

1. CH₄ (methane)
2. C₃H₈ (propane, CmHn – hydrocarbons)

III: Application:

- R – calibration gas and range
X – temperature class and accuracy

IV: Housing type:

3. "Plastic"

V: Interface options:

5. UART

Rating:

Max. Input Voltage:

Ui=5.4 V

Max. Input Current:

Ii = 200 mA

Max. Input Power:

Pi = 0.13 W

Internal capacitance:

Ci = 58.1 µF

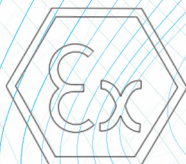
Internal inductance:

Li = 0 H

Service temperature range:

-40 °C ≤ Ta ≤ +60 °C

(16) Report Number:

– **KSCP/AR/24/Q00426, Issue 0**

(13)

SCHEDULE

(14)

CERTIFICATE No.: KSCP 24ATEX0033U, Issue:1

(17) Specific Condition(s) of use:

- When the component Ultra-low Power Infrared Gas Sensor MIPEX-04-X-XX-3.5 is integrated to a host equipment, the complete assembly shall be certified
- The equipment must be housed in an enclosure meeting the minimum IP20 ratings according to clause 6.1 of IEC 60079-11
- If the external part of the sensor is located outside the host equipment enclosure, the exposed surface area must be evaluated according to clause 7.4 of IEC 60079-0 to avoid risks of electrostatic discharges.

(18) Essential Health and Safety Requirements:

Met by compliance with the requirements mentioned in item 9.

(19) Remarks and additional information:

A detailed list of documents necessary to identify the approved type is included in the Report listed under item 16 of this certificate.

(20) Certificate history:

Issue	Issue date	Notes
0	13 th December, 2024	Initial certification
1	8 th July, 2026	Removed "Metrological properties of sensor" from the product description

