Physical-Technical Testing Institute
Ostrava - Radvanice

EU - Type Examination Certificate

(1)

(2) **Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

FTZÚ 18 ATEX 0004X

(4) Product: **Optochemical Sensor TecMicro**

(5) Manufacturer: **TecSense GmbH**

(6) Address: **Teslastrasse 4, A 8074 Grambach, Austria**

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

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, 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 number:

18/0004 dated 29.06.2018

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

EN 60079-0:2012+A11:2013, EN 60079-11:2012

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

(11) This certificate relates only to the design and construction of the specified product. 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:

II 1G Ex ia IIC T4 Ga

II 1D Ex ia IIIC T135°C Da

This certificate is valid till: **29.06.2023**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

PHYSICAL-TECHNICAL TESTING INSTITUTE FTZÚ Ex AO 210 NB 1026

Date of issue: 29.06.2018

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) EU - Type Examination Certificate No. FTZÚ 18 ATEX 0004X

(15) Description of Product:

The product is an intrinsically safe oxygen sensor. The enclosure of product is made from stainless steel valve, glass window and connector for connection of external circuits. Inside the enclosure is placed printed circuit board and integrated oxygen sensor. The connector includes wires for power supply and RS232 communication interface.

Technical parameters:
Ambient temperature: from -20°C to +80°C
Ingrees protection: IP65
Power supply and communication (connector pins):
Ui = 5V, ∑Ii = 250 mA, ∑Pi = 600 mW, ∑Ci = 7.15 µF, Li = 0

(16) Report Number.: 18/0004

(17) Specific Conditions of Use:

1. The product doesn´t meet the requirements for isolation distances between intrinsically safe circuit and enclosure which are listed in table 5 of standard EN 60079-11:2012. The enclosure has to be grounded in accordance with requirements in clause 16.2.3 of standard EN 60079-14:2014.
2. Ambient temperature: from -20°C to +80°C
3. The product connector shall not be exposed to effective sources of electrostatic charging, such as high-speed dust flow or mechanical friction.
4. The sensor face shall not be exposed to mechanical impact.
5. The ingress protection IP65 was verified with the plugged in connector.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate.

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

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(13) **Schedule**

(14) **EU - Type Examination Certificate No. FTZÚ 18 ATEX 0004X**

(19) Drawings and Documents:

Number:	Sheet:	Date:	Description:
-	21	28.06.2018	User´s manual TecMicro_ATEX
1	1	25.06.2018	Electronic parts
2	1	25.06.2018	Part list AS7000
3	1	25.06.2018	Part list RS232 adapter
4	3	25.06.2018	Connector
6	1	29.06.2018	AS7000 Schematic diagram
7	1	29.06.2018	RS232 adapter Schematic diagram
8	1	29.06.2018	Label

Responsible person:

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