



(1) **EU TYPE – EXAMINATION CERTIFICATE**

(2) **Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 - Equipment and protective systems intended for use in potentially explosive atmospheres, Annex III, Module B**

(3) EU-Type Examination Certificate Number:

**No. 221299209/X**

*Issue: 0*

(4) Product: **Equipment and protective systems intended for use in potentially explosive atmospheres;  
Fuel level sensor, Omnicomm**

Type: **LLS-Ex 5**

(5) Manufacturer: **Omicomm Technologies LLC**

(6) Address: **Office T3-1A, Str. 7, Build. 1, Fabrichnaya str., Schelkovo, Moscow Region, 141108, Russian Federation**

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

(8) TSÚ Piešťany, š.p. as Notified Body No. 1299 in accordance with Article 17 of the 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 the confidential report: Conformity assessment report No. 220500017/1 dated 23.06.2022.

(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 "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

(11) This EU-Type Examination Certificate relates only to the technical design 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 product or protective system shall include following:

 **II 1G Ex ia IIB T6 Ga**

Issue date: 23.06.2022

Expiry date: 22.06.2032

(following procedure according to Module D or F)



Ing. Dušan HANKO  
on behalf of TSÚ Piešťany, š.p., NB 1299

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Description of Product:

Omnicom LLS-Ex 5 fuel level sensors are designed to measure fuel level in tanks of vehicles and stationary fuel storages. Fuel level sensors also measure the temperature. RS-485 or RS-232 interfaces are used to exchange information with the device. The Omnicomm LLS-Ex 5 fuel level sensor is installed on special types of equipment or on stationary fuel tanks and storages, which require equipment explosion protection and have the "II 1G Ex ia IIB T6 Ga" explosion protection label. The sensor calibration is adjusted automatically when fuel composition or properties change. The types of fuel in which the sensor can operate: gasoline, summer fuel and winter diesel fuel and other liquid light petroleum products.

Different versions of Omnicomm LLS-Ex 5 are available depending on the length of the measuring probe: 700mm, 1000mm, 1500mm, 2000mm, 2500mm and 3000mm. Any measuring probe longer than 3000mm is composite. The following lengths 4000mm, 5000mm and 6000mm are used when using a composite measuring probe. The Omnicomm LLS-Ex 5 fuel level sensor is installed together with the BIS-MX spark protection unit manufactured by Omnicomm.

The product is intended for level measurement in zone 0, with the presence of gases of group IIB with temperature class T6.

Technical data of tested product:

Parameter	Value
Level measurement range depending on the version	0...700, 1000, 1500, 2000, 2500, 3000 mm
Measuring length when using a composite measuring probe	4000, 5000, 6000 mm
Limit of the allowed main reduced error of level measurement	± 0,5 %*
Interface for measured values output	RS-232, RS-485
Programmable interface transmission rate	1200, 2400, 4800, 7200, 9600, 14 400, 19 200, 38 400, 57 600, 115 200 bit/sec
Power supply voltage (BIS-MX)	7...60 V
Absorbed current, not more than	50 mA
Power consumption, not more than	0,4 W
Body protection rating	IP68
Electric strength of galvanic insulation, not less than	1500 V
Terms of Use:	
Ambient temperature	From - 40 to +60 °C
Extreme temperatures	- 60 and + 80 °C
Maximum humidity	100 %
Digital code range corresponding to the maximum level measurement value	1...4095
Digital code range corresponding to the minimum level measurement value	0...4094
Temperature measuring range	From - 40 to +60 °C
Measurement time period	1 sec
Automatic data output interval	From 1 to 255 sec
Operating mode	Continuous
Overall dimensions	87,3 × 83,5 × (22+lenght of the measuring probe)mm
Weight, not more than	2 kg

\*The reported accuracy is guaranteed when working with the fuel for which the calibration was performed or when using the auto-tuning function when filling the tank to the full

Electrical parameters of intrinsic safety

Parameter name	Value
Maximum input voltage Ui	6,95 V
Maximum input current Ii	0,46 A
Maximum internal capacity Ci	10 µF
Maximum internal inductance Li	50 µH

Installation and connection:

Instructions for installation and connection can be found in the Operating Manual 29.32.30.160-029-03066711-2018 OM



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(16) Report: No. 125ILPMK from 16.03.2022.

(17) Special conditions for safe use:

The Fuel level sensors, Omnicomm type LLS-Ex 5 must be connected only to Spark protection unit, Omnicomm, Type: BIS-MX.

(18) Essential health and safety requirements:

Met by compliance with the requirements mentioned in item 9.

(19) Remarks and additional information:

The conformity assessment procedure is not completed and manufacturer can affix the CE, issue the EU declaration of conformity and put the product on the market only after the conformity assessment according to one of the follow-up procedures (Module D or E) set out in the Directive 2014/34/EU.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.

This certificate cannot be used as a certificate for the product, where a change influencing conformity with the applied normative documents and regulations was done without the approval of the TSÚ Piešťany, š.p.

It is forbidden to modify, amend or rewrite the data in the certificate.

The holder of this certificate must keep the conditions specified in the General Rules for Product Certification, which are freely available at [www.tsu.eu](http://www.tsu.eu)



