



[1] **EU-TYPE EXAMINATION CERTIFICATE - Translation**

[2] Equipment or protective systems
intended for use in potentially explosive atmospheres, Directive 2014/34/EU

[3] EU-type examination certificate number **IBExU15ATEX1049 X** | Issue 1

[4] Product: **Level measurement system**
Type: NL10150 with submersible probe NivuBar I²C

[5] Manufacturer: NIVUS GmbH

[6] Address: Im Täle 2
75031 Eppingen
GERMANY

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

[8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 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 the confidential test report IB-21-3-0077.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:
EN IEC 60079-0:2018, EN 60079-11:2012
Except in respect of those requirements listed at item [18] of the schedule.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.

[11] This EU-type examination 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 must include the following:

Ex II 2G Ex ia IIB T4 Gb

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By order

Dipl.-Ing. Willamowski



Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2021-08-02

[13] **Schedule**

[14] **Certificate number IBExU15ATEX1049 X | Issue 1**

[15] **Description of product**

The Level measurement system type NL10150 with submersible probe NivuBar I²C is used to display and record the pressures and levels. The power supply comes from three primary cells connected in series.

The equipment is intended for use in potentially hazardous areas, where category 2G devices are required. It provides internal intrinsically safe "ia" circuits and is operated without external connections. The covered interface is used only in a safe area and for configuration and transfer of data.

Technical data

Ambient temperature range

Data recording module: -10 °C to +55 °C

Submersil probe: -20 °C to +70 °C

Electrical data

Supply circuit

Internal parameters (no external connections)

Battery voltage: 3 x 1.5 V

Open circuit voltage according to EN 60079-0: 4.95 V

Power consumption: max. 20 mA

Variations compared to the basic certificate:

- *The devices were modified, without influence on the explosion protection.*
- *The devices comply with the requirements of the current standards.*

[16] **Test report**

The test results are recorded in the confidential test report IB-21-3-0077 of 2021-07-30. The test documents are part of the test report and they are listed there.

Summary of the test results

The Level measurement system type NL10150 with submersible probe NivuBar I²C fulfils the requirements of type of protection Intrinsic safety 'ia' for an electrical equipment for equipment group II, category 2G, explosion group IIB and temperature class T4.

[17] **Specific conditions of use**

- The ambient temperature range is fixed from -10 °C to +55 °C for the data recording module and from -25 °C to +70 °C for the submersible probe.
- The operation of the Level measurement system type NL10150 is allowed only in combination with the submersible probe type NivuBar I²C.
- Opening the battery compartment cover and removal of the protective cover of the interface connector must not be done in a hazardous atmosphere.
- The operation of the communication interface in explosive areas is not permitted.
- Only use the batteries specified: 3x 1.5 V / AA Duracell Plus Power.

[18] **Essential health and safety requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report: none

[19] **Drawings and Documents**

The documents are listed in the test report.

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