# **EU-TYPE EXAMINATION CERTIFICATE**



### Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- [3] EU-Type Examination Certificate Number: DEMKO 15 ATEX 1446X Rev. 3
- [4] Product: NETRIS®2 Series of telemetry units
- [5] Manufacturer: Sensile Technologies SA
- [6] Address: Rue de Lausanne 45, 1110 Morges Switzerland
- [7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [8] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to 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. US/UL/ExTR16.0121/01
- [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] If the sign "X" is placed after the certificate number, it indicates that the product is subject to special conditions for safe 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 the certificate.
- [12] The marking of the product shall include the following:

# 𝔄 II 1(1) G Ex ia [ia Ga] IIB T3 Ga

Certification Manager Jan-Erik Storgaard Jan-Erik Storgaard Date of issue: 2016-01-07 Re-issued: 2022-09-29

Notified Body UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

[1]

[2]



# [13]

[14]

# Schedule EU-TYPE EXAMINATION CERTIFICATE No. DEMKO 15 ATEX 1446X Rev. 3

### [15] Description of Product

The NETRIS®2 series of products (also called telemetry unit in the document) is a measuring and transmitting device using short range (Radio Frequency) and GSM 2G, UMTS 3G and LTE 4G network for data transmission. NETRIS®2 series is self-powered by a replaceable primary battery pack. The module is mainly connected to a Hall Effect or pressure sensor for measuring the liquid level of fuel tank such as gasoline, heating oil or Liquefied Petroleum Gas (LPG).

Nomenclature for type:

- NETRIS®2 -Z : Standard telemetry unit
  - Z 2G QUAD, Part No. Z1GEQUD-\*
  - Z 2G/3G EU, Part No. Z1HEEUG-\*
  - Z 2G/LTE EU, Part No. Z1ME1E2-\*
  - Z 2G/LTE WW, Part No. Z1ME1WW-\*
  - Z 2G/LTE WW, Part No. Z1MEGWW-\*
- NETRIS®2 -R : Telemetry unit sending data over low range RF
  - o R Short Range, Part No. R1NF868-\*
- NETRIS®2 -W : Telemetry relay unit, collecting data from NETRIS®2 -R and transmitting via cellular network to the server
  - W 2G QUAD, Part No. W1GEQUD-\*
  - W 2G QUAD, Part No. W1GEGNS-\*
  - W 2G/LTE WW GNSS, Part No. W1ME1WG-\*
  - W 2G/LTE WW GNSS, Part No. W1MEGWG-\*

where "-\*" denotes external mounting options which do not affect construction.

#### Performance testing

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range

The ambient temperature range is -40 °C to +60 °C.

#### Electrical data

Intrinsically safe specifications for Part Nos. R1NF868, W1GEGNS, W1GEQUD, W1ME1WG, W1MEGWG, Z1GEQUD, Z1ME1E2, Z1ME1WW, Z1MEGWW:

 $\begin{array}{rrrr} U_{o} & : & 5.88 \ V \\ I_{o} & : & 192.2 \ mA \end{array}$ 

$P_{o}$ : 281 mW												
L <sub>o</sub> (mH)	6.3	5.0	2.0	1.0	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002
C <sub>o</sub> (μF)	5.7	6.8	11	13	17	23	30	39	63	100	230	1000

Intrinsically safe specifications for Part No. Z1HEEUG:

U<sub>o</sub> : 9.85 V

I<sub>o</sub> : 196.9 mA

 P.		299 mW									
L	₀ (mH)	5.4	5.0	2.0	1.0	0.5	0.2	0.1	0.05	0.02	0.01
C	C₀ (μF)	2.2	2.4	3.9	5.1	6.5	8.8	11	14	21	22

The Lo and Co parameters, given by pair in the tables, already consider combination circuits.

Routine tests None

#### [16] <u>Descriptive Documents</u>

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

#### [17] Specific conditions of use:

Do not rub due to electrostatic hazards.

#### Schedule [13] **EU-TYPE EXAMINATION CERTIFICATE No.** [14] DEMKO 15 ATEX 1446X Rev. 3

# [18]

Essential Health and Safety Requirements The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Netris®2 has in addition passed the tests for Ingress Protection to IP66 in accordance with EN60529:1997+A2:2013.

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.

