



1 **EU – Type Examination Certificate**

2 Equipment or Protective System Intended for use in Potentially Explosive Atmospheres
Directive 2014/34/EU

3 EU – Type Examination Certificate Number: **KIWA 20ATEX0022** Issue: **1**

4 Product: **Modem – Datalogger Type UNICOM 300 N531**

5 Manufacturer: **Wigersma & Sikkema**

6 Address: **Leigraafseweg 4, 6983 BP Doesburg
The Netherlands**

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

8 Kiwa Nederland B.V., Notified Body number 0063 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 ATEX Assessment Report No. 200200950.

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 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 shall include the following:



II (1) G

[Ex ia Ga] IIC

Kiwa Nederland B.V.
Unit Kiwa ExVision
Wilmersdorf 50
P.O. Box 137
7300 AC Apeldoorn
The Netherlands

Tel. +31 88 998 34 93
Fax +31 88 998 36 85
ExVision@kiwa.nl
www.kiwaexvision.com

Kiwa Nederland B.V.

Ron Scheepers
Management Director

Issue date:

24 June 2020

First issue:

This certificate shall, as far as applicable, be revised before the date of cessation of presumption of conformity of (one of) the included standards above as communicated in the Official Journal of the European Union.

© Integral publication of this certificate in its entirety and without any change is allowed.

13 SCHEDULE

14 EU – Type Examination Certificate KIWA 20ATEX0022

Issue No. 1

15.1 Description of Product

The Modem – Datalogger Type UNICOM 300 N531 is used for wireless communication of data from and to equipment to which it is connected via a pulse or serial interface.

The unit is provided with a number of indicator LED's, a key for control, an infrared service interface and a pulse output. Optionally it can be equipped with an internal or external back up battery.

Ambient temperature range -40 °C to +60 °C.

Radio interface (GSM): Transmitted power < 3,5 W.

15.2 Electrical Data

AC Supply circuit (CON101 L and N):

$U_n = 230 \text{ Vac}$; 0.5 W, 0.1 A; $U_m = 250 \text{ Vac}$.

12 V rechargeable battery input (CON102 + and -):

$U_m = 250 \text{ Vac}$.

DC Supply circuit (CON103 + and -):

$U_n = 12 - 30 \text{ Vdc}$; 0.5 W, 0.6 A; $U_m = 250 \text{ Vac}$.

Pulse Output circuit (terminal 9, 10 and 11):

$U_n = 20 \text{ Vdc}$; $U_m = 250 \text{ Vac}$.

External Supply output circuit (CON202 + and -):

in type of protection intrinsic safety Ex ia IIC or IIB, with the following maximum values:

$U_o = 8,7 \text{ V}$; $I_o = 580 \text{ mA}$; $P_o = 1,3 \text{ W}$; $C_o = 5,7 \mu\text{F}$; $L_o = 0,1 \text{ mH}$.

Namur circuit (terminal 1 and 2):

in type of protection intrinsic safety Ex ia IIC or IIB, with the following maximum values:

$U_o = 9,6 \text{ V}$; $I_o = 10 \text{ mA}$; $P_o = 24 \text{ mW}$; $C_o = 3 \mu\text{F}$; $L_o = 100 \text{ mH}$.

or

in type of protection intrinsic safety Ex ia IIC or IIB, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 9,6 \text{ V}$; $I_i = 10 \text{ mA}$; $P_i = 10 \text{ mW}$; $C_i = 0 \mu\text{F}$; $L_i = 0 \text{ mH}$.

Pulse input circuit (terminal 3, 4 and 5):

in type of protection intrinsic safety Ex ia IIC or IIB, with the following maximum values:

$U_o = 6,5 \text{ V}$; $I_o = 12 \text{ mA}$; $P_o = 20 \text{ mW}$; $C_o = 24 \mu\text{F}$; $L_o = 100 \text{ mH}$.

or

in type of protection intrinsic safety Ex ia IIC or IIB, only for connection to a certified intrinsically safe circuit, with the following maximum values:

$U_i = 6,5 \text{ V}$; $I_i = 10 \text{ mA}$; $P_i = 10 \text{ mW}$; $C_i = 0 \mu\text{F}$; $L_i = 0 \text{ mH}$.

DATA circuit (terminal 6 and 7):

in type of protection intrinsic safety Ex ia IIC or IIB, with the following maximum values:

$U_o = 6,5 \text{ V}$; $I_o = 13 \text{ mA}$; $P_o = 21 \text{ mW}$; $C_o = 24 \mu\text{F}$; $L_o = 100 \text{ mH}$.

REQ circuit (terminal 7 and 8):

in type of protection intrinsic safety Ex ia IIC or IIB, with the following maximum values:

$U_o = 6,5 \text{ V}$; $I_o = 5 \text{ mA}$; $P_o = 8 \text{ mW}$; $C_o = 24 \mu\text{F}$; $L_o = 100 \text{ mH}$.

13 **SCHEDULE**

14 **EU – Type Examination Certificate KIWA 20ATEX0022** **Issue No. 1**

15.3 **Instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

16 **ATEX Assessment Report Number**

200200950.

17 **Specific Conditions of Use**

None.

18 **Essential Health and Safety Requirements**

All relevant Essential Health and Safety Requirements are covered by the standards listed at section 9.

19 **Drawings and Documents**

As listed in ATEX Assessment Report No. 200200950.