



Ontploffingvoorkomingstechnologie  
Explosion Prevention Technologies

# MTEEx Laboratories

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## INSPECTION AUTHORITY (IA) CERTIFICATE

**WIKA Instruments (Pty) Ltd.**  
P.O. Box 75225  
Gardenview  
2047

**Issued:** 2026/03/06  
**Expire:** 2029/03/06  
**Revision:** 0  
**Job File:** 3367

Applicant:

**WIKA INSTRUMENTS (PTY) LTD.**

For validity purposes, the following marking must be added to all equipment covered by this certificate:

**IA Number:** MTEEx-S/26.0120 X  
**Manufacturer:** WIKA Alexander Wiegand SE & Co. KG  
**Supplier:** WIKA Instruments (Pty) Ltd.  
**Equipment:** Telemetry Unit  
**Model/Type:** NETRIS@2LM or NETRIS@2-\*L3\*  
**Ex Rating:** Ex ia [ia Ga] IIC T3 Ga  
**Serial No:** All units imported between the issue and expiry dates of this Certificate.



### Standards used:

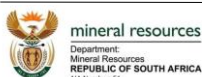
<b>SANS 60079-0: 2019 Ed.6</b> <b>IEC 60079-0: 2017 Ed.7</b>	<b>Explosive atmospheres – Part 0: General requirements.</b>
<b>SANS 60079-11: 2012 Ed.4</b> <b>IEC 60079-11: 2011 Ed.6</b>	<b>Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i".</b>

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 9(3) of the Occupational Health and Safety Act, provided that the apparatus is used as prescribed in accordance with the following **Notes**:

- 1) Compliance with any conditions set out in this Certificate.
- 2) This certificate only covers equipment imported between the "Issued" and "Expiry" dates of this certificate.
- 3) When the supporting Q.A.R. (Quality Assessment Report) or Q.A.N. (Quality Assurance Notification) of the equipment manufacturer expires, it is the responsibility of the applicant (as mentioned above) to submit a valid Q.A.R. or Q.A.N. to MTEEx Laboratories, to maintain the validity of the IA certificates.
- 4) It is the responsibility of the supplier to ensure that the marking label complies with the requirements of the relevant regulator.
- 5) Once issued, the certificate remains valid for the serviceable lifecycle of the device. The state of the device is validated by visual or close inspections, by the end user, at intervals not exceeding two years.

Reviewed By + Signature (TL):	A. van Niekerk	
Approved By + Signature (CB): (MTEEx Laboratories Technical Signatory)	D. Young	



MTEEx Laboratories is an Accredited Test Laboratory (ATL) in terms of the NCOP: "Regulatory Requirements for Explosion-Protected Apparatus".

## 1. OVERVIEW

NETRIS®2LM products are telemetry units designed for remote measurement. Data transmission is done by means of short range (Radio Frequency). NETRIS®2LM or NETRIS®2-<sup>\*</sup>L3<sup>\*</sup> is self-powered by a battery pack (with primary and secondary cells). The module is mainly connected to a 4-20mA sensor for measuring different data (for ex : temperature, liquid level, flowrate, etc...).

Classification of installation and use:	Fixed
Ingress protection:	IP20
Rated ambient temperature range (°C):	-40 °C ... +60 °C

## 2. REASON FOR REVIEW

Revision 0: National Code of Practice (NCOP) Requirements.

## 3. DOCUMENTATION PROVIDED

- IECEx Certificate of Conformity (IECEx SEV 22.0027 X, Issue 2).
- IECEx Quality Assurance Report (DE/BVS/QAR07.0010/22).

## 4. ELECTRICAL / SAFETY PARAMETERS

Ratings:

Use of a manufacturer specific battery pack type or BN2D150 with a nominal voltage of 3.6 V.

Output parameters for the Sensor sub circuit:

$$U_o \leq 26 \text{ V}$$

$$I_o \leq 90 \text{ mA}$$

$$P_o \leq 550 \text{ mW}$$

$$C_i \leq 3.6 \text{ nF}$$

$$L_i \leq 0.3 \text{ mH}$$

The following tables show the combinations of  $L_o$  and  $C_o$  including occurring line reactance for the connection to the Sensor sub circuit in the respective gas group verified using the ISPARK-calculation program. The internal capacitance  $C_i = 3.6 \text{ nF}$  and inductance  $L_i = 0.3 \text{ mH}$  is already taken into account. The maximum values for  $L_o$  and  $C_o$  are highlighted in grey.

Maximum allowed capacitance and inductance for gas group IIB:

$C_o$ [nF]	446	486	566	686
$L_o$ [mH]	25.7	19.7	9.7	4.7

Maximum allowed capacitance and inductance for gas group IIC:

$C_o$ [nF]	37	43	60	78
$L_o$ [mH]	2.2	1.7	0.7	0.2

## 5. INSTALLATION INSTRUCTIONS

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

**6. CONDITIONS OF CERTIFICATE (X)**

- Under certain extreme circumstances, the non-metallic enclosure may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.

**MTEEx Laboratories**

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MTEEx Laboratories takes no responsibility for any non-conforming tests / assessments / results which is not in compliance with the relative Standards. By marking the equipment as mentioned in the documentation, the manufacturer takes full responsibility that the equipment has indeed complied with the original type assessment and has been subjected to any routine verification(s) / test(s) respectively.

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**End of Report**