

- (2) **Equipment and protective systems intended for use in potentially explosive atmospheres  
Directive 94/9/EC**

(1) **EC-TYPE EXAMINATION CERTIFICATE**

- (3) Number of the EC type examination certificate: **INERIS 08ATEX0036**

- (4) Equipment or protective system:

**ANALIZERS TYPE GPR 1500./1800./2500. and GPR 2800.**

- (5) Manufacturer: **ANALYTICAL INDUSTRIES INC. DBA ADVANCED INSTRUMENTS INC.**

- (6) Address: **2855 METROPOLITAN PLACE  
POMONA CA 91767 - USA**

- (7) This equipment or protective system and any other acceptable alternative of this one are described in the annex of this certificate and the descriptive documents quoted in this annex.

- (8) INERIS, notified body and identified under number 0080, in accordance with article 9 of Council Directive 94/9/EC of the 23<sup>rd</sup> March 1994, certifies that this equipment or protective system fulfils the Essential of Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, described in annex II of the Directive.

The examinations and the tests are consigned in report No 021073/08.

- (9) The respect of the Essential Health and Safety Requirements is ensured by:

- conformity with:

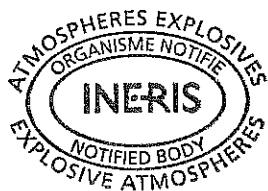
EN 60079-0 : 2006  
EN 60079-1 : 2004  
EN 60079-11 : 2007

- specific solutions adopted by the manufacturer to meet the Essential Health and Safety Requirements described in the descriptive documents.

- (10) Sign X, when it is placed following the Number of the EC type examination certificate, indicates that this equipment and protective system is subjected to the special conditions for safe use, mentioned in the annex of this certificate.
- (11) This EC type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system, these are not covered by this certificate.
- (12) The marking of the equipment or the protective system will have to contain:

 II 2 G

Verneuil-en-Halatte, 2008 12 23



Director of the Certifying Body,  
By delegation  
T.HOUEIX  
Certification Officer  
Certification Division

(13)

## ANNEX

(14)

EC TYPE EXAMINATION CERTIFICATE N° INERIS 08ATEX0036

(15)

### DESCRIPTION OF THE EQUIPMENT OR THE PROTECTIVE SYSTEM

- The GPR 1500/1500D/2500/2500S analysers are composed by an intrinsic safety PCB. They must be powered by an intrinsic safety barrier placed in safe area.

- The GPR 1500 (A)IS/2500 (A)IS/1800 (A)IS/2800 (A)IS analysers are composed by a flameproof enclosure ADELET type XIHLX covered by the EC type certificate examination DEMKO 02ATEX0240737U and an intrinsic safety PCB. These two enclosures are electrically connected by a sealing and conduit entry, covered by the EC type examination certificates CESI 03ATEX085 and CESI 01ATEX104U.

### PARAMETERS RELATING TO THE SAFETY

GPR 1500 IS / 2500 IS / 1800 IS / 2800 IS - Flameproof enclosure :

Maximum Supply voltage : 24 VDC  
 Maximum powers dissipated : 1,6 W

GPR 1500 AIS / 2500 AIS / 1800 AIS / 2800 AIS - Flameproof enclosure :

Maximum Supply voltage : 24 VDC/230VAC  
 Maximum powers dissipated : 7 W

GPR 1500 / 1500 D / 2500 / 2500 S - Intrinsic safety :

	Ui	Ii	Ci	Li
Plug	30 V	0.1 A	0 µF	0 mH


**MARKING**

Marking has to be readable and indelible; it has to include the following indications:

1) GPR 1500 / 1500 D / 2500 / 2500 S :

Analytical INDUSTRIES INC. DBA ADVANCED INSTRUMENTS INC.  
POMONA CA 91767 - USA

GPR (\*)  
INERIS 08ATEX0036  
(Serial number)  
(Year of construction)

 II 2 G  
Ex ia IIB T4  
T.amb : -20°C +50°C


WARNING : POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS

(\*) One of the following types : **GPR 1500 / 1500 D / 2500 / 2500 S.**

2) GPR 1500 IS /2500 IS / 1800 IS / 2800 IS or GPR AIS /2500 AIS / 1800 AIS / 2800 AIS:

Analytical INDUSTRIES INC. DBA ADVANCED INSTRUMENTS INC.  
POMONA CA 91767 - USA

GPR (\*)  
INERIS 08ATEX0036  
(Serial number)  
(Year of construction)

 II 2 G  
Ex d [ib] ib IIB T4  
T.amb : -20°C +50°C

WARNING : POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS

(\*) One of the following types : **GPR 1500 IS /2500 IS / 1800 IS / 2800 IS or GPR AIS /2500 AIS / 1800 AIS / 2800 AIS.**

On the cover of the flameproof enclosure :

INERIS 08ATEX0036  
Ex d [ib] ib IIB T4  
WARNING - DO NOT OPEN IF AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT

Marking may be carried out in the language of the country of use.

The protective system or equipment has also to carry the marking normally stipulated by its construction standards.

**ROUTINE EXAMINATIONS AND TESTS**

None.

**(16) DESCRIPTIVE DOCUMENTS**

The descriptive documents quoted hereafter constitute the technical documentation of the equipment, subject of this certificate.

- Technical file GPR1500 / 2500 (16 rubriks) signed on 2008.12.17
- Technical file GPR1500 IS / 2500 IS (17 rubriks) signed on 2008.12.17
- Technical file GPR1500 AIS / 2500 AIS (17 rubriks) signed on 2008.12.17

**(17) SPECIAL CONDITIONS FOR SAFE USE**

None.

**(18) ESSENTIAL SAFETY AND HEALTH REQUIREMENTS**

The respect of the Essential Health and Safety Requirements is ensured by:

- Conformity to the standards quoted in clause (9).
- All provisions adopted by the manufacturer and defined in the descriptive documents.

The respect to the clause §1.5 of annex II to the Directive for this analyzer does not form part of this evaluation.