

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

(2) Equipment or protective system intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate Number: **KEMA 05ATEX1096 X**

(4) Equipment or protective system: **GasAlertMicro 5 Portable Gas Detectors Models M5-... and M5PID-...**

(5) Manufacturer: **BW Technologies, Ltd.**

(6) Address: **2840-2nd Avenue S.E., Calgary, Alberta T2A 7X9, Canada**

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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. 2083809.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1997 + A1, A2 EN 50020 : 2002 EN 50284 : 1999

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system according 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 protective system shall include the following:

 **II 1 G EEx ia IIC T4 or 139,8 °C, 153 °C, 163 °C**

Arnhem, 9 May 2005
KEMA Quality B.V.



T. Pijpker
Certification Manager

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SCHEDULE

(13)

(14)

to EC-Type Examination Certificate KEMA 05ATEX1096 X

(15) **Description**

The GasAlertMicro 5 is a portable multi-gas detector for monitoring up to 5 gases simultaneously and continuously: oxygen, combustible gases, carbon monoxide, hydrogen sulfide and/or one or two toxic gases. The GasAlert Micro 5 may be provided with a Multi Media Card (MMC) in various memory sizes and with a photo ionization detector (PID). The sampling method is either by diffusion or pumped.

Technical data

The equipment is powered by the associated battery pack consisting of 3 Duracell MN1500 alkaline cells, 3 Energizer E91 alkaline cells or by the Sanyo HR-3U-2300 mAh or HR-3U-2500 mAh NiMH rechargeable battery pack.

The temperature class depends on the maximum ambient temperature and battery type, as follows:

Duracell MN1500 battery pack:

- temperature class T4 with ambient temperature range $-20\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
- temperature class 139,8 $^{\circ}\text{C}$ with ambient temperature range $-20\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$

Energizer E91 battery pack:

- temperature class 153 $^{\circ}\text{C}$ with ambient temperature range $-20\text{ }^{\circ}\text{C}$ to $+40\text{ }^{\circ}\text{C}$
- temperature class 163 $^{\circ}\text{C}$ with ambient temperature range $-20\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$

Sanyo HR-3U (2300 mAh or 2500 mAh) battery pack:

- temperature class T4 with ambient temperature range $-20\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$

Degree of ingress protection : IP30 minimum according to EN 60529.

Installation instructions

The instructions as provided by the manufacturer shall be followed in detail in order to assure proper and safe operation of the equipment.

Routine tests

None.

(16) **Report**

KEMA No. 2083809.

(17) **Special conditions for safe use**

Only the batteries as stated under (15) above may be used in the GasAlertMicro 5. The alkaline batteries may only be replaced in a non-hazardous atmosphere.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2083809.