

1 EC TYPE EXAMINATION CERTIFICATE

2 Equipment or protective system intended for use in potentially explosive atmospheres –
Directive 94/9/EC – Annex III

3 EC Type Examination Certificate No.: **TRL05ATEX21090X**
4 Equipment: **Cam Lock Pilot - portable multi-gas detector**
5 Manufacturer: **Aerion Technologies Inc**
6 Address: **6555 S. Kenton Street
Suite 304
Centennial
CO 80111
USA**

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

8 TRL Compliance Ltd, Notified Body number 0891 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment or protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report **XU1305B/6897**.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in section 18 of the schedule to this certificate, has been assured by compliance with:

EN50014:1997/A2:1999, EN50018:2000 and EN50020:2002


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

11 This EC-Type Examination certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of this equipment or protective system shall include the following:

Ex II 2 G EEx ia d IIC T4 Tamb = -20°C to +50°C

This certificate and its schedules may only be reproduced in its entirety and without change. This certificate is issued in accordance with the TRL ATEX Certification Scheme.



S K Barrowcliff, Director, Safety Division

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Distribution:
Aerion Technologies Inc and TRL Compliance Ltd

13 **SCHEDULE TO EC TYPE EXAMINATION CERTIFICATE**

14 **CERTIFICATE NUMBER TRL05ATEX21090X**

15 **General description of equipment or protective system included within the scope of this certificate**

The Cam Lock Pilot multi-gas detector is a portable multi-gas detector approximate dimensions 12cm x 7cm x 3.5cm. It is housed in a polymeric enclosure with a display screen mounted within the front of the equipment. It can simultaneously monitor oxygen, combustible gases, hydrogen sulfide and carbon monoxide depending on the sensor configuration. When the gas concentrations reach or exceed gas alarm levels, the user is alerted by a bright alarm light, audible buzzer and an internal vibrating alarm. The equipment is powered from a permanently fitted (and not user replaceable) lithium-ion battery which is recharged via an external charger. Charging/re-charging of the battery is only permitted in a non-hazardous area. All models of the equipment incorporate a combustible (EX) gas sensor which is an ATEX EEx d approved component (EC Type Examination Certificate reference SIRA01ATEX1073U).

The equipment certified is the Cam Lock Pilot, manufactured by Aerion Technologies.

The following models are covered by this certificate:

- EX-955-100-100 Cam Lock Pilot EX with EU power adapter
- EX-955-100-101 Cam Lock Pilot EX with UK power adapter
- EX-955-100-102 Cam Lock Pilot EX with switch mode power adapter
- EX-955-100-200 Cam Lock Pilot OX/EX with EU power adapter
- EX-955-100-201 Cam Lock Pilot OX/EX with UK power adapter
- EX-955-100-202 Cam Lock Pilot OX/EX with switch mode power adapter
- EX-955-100-300 Cam Lock Pilot OX/EX/CO with EU power adapter
- EX-955-100-301 Cam Lock Pilot OX/EX/CO with UK power adapter
- EX-955-100-302 Cam-Lock Pilot OX/EX/CO with switch mode power adapter
- EX-955-100-350 Cam Lock Pilot OX/EX/HS with EU power adapter
- EX-955-100-351 Cam Lock Pilot OX/EX/HS with UK power adapter
- EX-955-100-352 Cam Lock Pilot OX/EX/HS with switch mode power adapter
- EX-955-100-400 Cam Lock Pilot OX/EX/CO/HS with EU power adapter
- EX-955-100-401 Cam Lock Pilot OX/EX/CO/HS with UK power adapter
- EX-955-100-402 Cam Lock Pilot OX/EX/CO/HS with switch mode power adapter

Scheduled drawings and documents

<u>Document</u>	<u>Issue</u>	<u>Date</u>	<u>Pages</u>	<u>Description</u>
458-020-202	1	17 MAY 06	1	Pilot ATEX Battery Cell only
526-000-654-2	2	22 MAR 06	2	Top housing
526-000-655-2	2	22 MAR 06	1	Bottom housing
593-030-400-CL-3	3	23 MAR 06	1	Pilot Cam-Lock Faceplate
EX-500-023-000	1.00	22 FEB 06	5	PILOT Sensor PCB (ATEX)
EX-500-023-101	1.06	29 MAY 06	7	PILOT Main PCB (ATEX)
EX-593-030-410	3	26 APR 06	1	PILOT APPROVAL LABEL – ATEX
EX-921-020-202	1	17 MAY 06	1	PILOT ATEX BATTERY
EX-927-023-010-ASY	1.00	22 FEB 06	1	Pilot Sensor PCA - ALPHA (ATEX) Assembly
EX-927-023-010-BOM	1.00	23 FEB 06	2	Pilot Sensor PCA - ALPHA COSH (ATEX) BOM
EX-927-023-010-SCH	1.00	22 MAR 06	4	PILOT Sensor PCA (ATEX) schematic
EX-927-023-011-ASY	1.00	22 FEB 06	1	Pilot Sensor PCA - CTL (ATEX) Assembly
EX-927-023-011-BOM	1.00	23 FEB 06	2	Pilot Sensor PCA - CTL COSH (ATEX) BOM
EX-927-023-101-ASY	1.06	29 MAY 06	2	Pilot Main PCA (ATEX) Assembly
EX-927-023-101-BOM	1.04	23 MAY 06	2	Pilot Main PCA (ATEX) BOM
EX-927-023-101-SCH	1.03	22 MAR 06	4	Pilot Main PCA (ATEX) schematic
Pilot manual ATEX	1.03	8 MAY 06	26	Instruction manual (Cam Lock Ltd)

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16 **Test report No.:** XU1305B/6897

17 **Special conditions for safe use**

- (1) The Cam Lock Pilot must only be charged in a non-hazardous area using the AIM supplied charger (Aerion part number 457-221-002, 457-221-003 or 457-221-004)
- (2) The Cam Lock Pilot must only be opened in a non-hazardous area. The cover and environmental seal must be carefully replaced and checked for damage after changing the sensors or after installing a replacement rechargeable battery.
- (3) If any damage to the Cam Lock Pilot is noted then it must not be used in a hazardous environment.
- (4) The Cam Lock Pilot must not be wiped clean or rubbed in a hazardous area to prevent an electrostatic hazard.
- (5) Only the Aim supplied Cam Lock Pilot ATEX battery (Aerion part number EX-921-020-202) can be used with the Cam Lock Pilot .

18 **Essential health and safety requirements**

Covered by application of the standards listed in section 9 of this certificate and the assessment conducted in the test report listed in section 16 of this certificate.

19 **Additional information**

Special conditions for manufacture

- (1) All encapsulent should have a minimum depth of 1mm around the fuses F1 and F3 (drawing EX-927-023-101-ASY rev 1.06 refers).
- (2) Battery assembly (reference drawing EX-921-020-202 rev 1) - The encapsulation around the battery terminals must be a minimum of 1mm thick and must effectively enclose the battery terminals and adhere fully to the battery casing. It must be ensured that before encapsulation the separation of conductors at the battery terminals exceeds 0.5mm. A sample of the battery assembly should be the subject of regular audit by the manufacturer to ensure compliant construction in accordance with drawing EX-921-020-202 rev 1. In addition, the ATEX Notified Body responsible for the Quality Assurance Notification should inspect the battery assembly during their audits of the manufacturing process.

Photographs



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Details of markings



Details of variations to this certificate

None

Notes to CE marking

In respect of CE Marking, TRL Compliance Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.