



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: **ITS09ATEX26868X**

4. Equipment or Protective System: **iCAM501 Intrinsically Safe Digital Camera**

5. Manufacturer: **EXTRONICS LIMITED**

6. Address: **Meridian House
Roe Street, Congleton
Cheshire, CW12 1PG
United Kingdom**

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. Intertek Testing and Certification Limited, notified body number 0359 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 Intertek Report Ref 09038825 Issue 1 dated December 2009.


9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2009, EN 60079-11:2007 and EN 60079-26:2007 except in respect of those requirements referred to at item 18 of the Schedule.

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 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 protective system shall include the following:-

 II 1 G Ex ia IIB T4 Ga

 II 2 G Ex ia IIC T4 Gb

-20°C ≤Ta ≤60°C

A T Austin
Certification Officer
15 December 2009

Intertek Testing & Certification Limited
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13. **SCHEDULE**

14. **EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS09ATEX26868X**

15. **DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM**

The **EXTRONICS LIMITED iCAM501** is an intrinsically safe digital camera with a voice recording function. It comprises an anti static PC/ABS enclosure housing an assembly of 3 PCB's; a CPU board, a keypad board and an LED flash board. The CPU and keypad PCB stack is encapsulated along with the camera lens assembly. The LED flash board is soldered to the encapsulated board assembly and the LED flash units are encapsulated.

The camera is powered by 2 off Duracell (or Duracell Procell) MN1500 AA alkaline cells, housed within the camera's battery compartment, accessible by a cover opened by a quarter turn screw.

The Duracell MN1500 AA alkaline cells are spark ignition safe for gas group IIC, temperature class T4 at +60°C ambient temperature and a tool operated fastener for the battery compartment is not required. Changing the batteries in the hazardous area is permitted.

Underneath the battery compartment cover is a USB port for the purposes of offloading picture or other data or for programming the camera. The unit may be connected to any PC or similar device with a USB port.

Um = 250V ac

16. **REPORT NUMBER**

Intertek Report Ref 09038825 Issue 1 dated December 2009.

17. **SPECIAL CONDITIONS FOR SAFE USE**

The condition of safe use relating to this product:

The user shall not carry more than a maximum of 2 spare MN 1500 AA Cells into the hazardous area. Precautions shall be taken to prevent short circuiting of un-protected battery terminals. Discharged cells shall be removed from the hazardous area.

Conditions of manufacture relating to the product / routine tests:

None

18. **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSR'S)**

The relevant EHSR's have been identified and assessed in Intertek Report Ref 09038825 Issue 1 dated December 2009.

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19. DRAWINGS

Title:	Sheets:	Drawing No.:	Rev. Level:	Date:
General Arrangement Drawings	3	324963	01	24/11/2009
Main PCB Schematic	10	324388	03	24/11/2009
Keypad PCB Schematic	1	322847	04	24/11/2009
Flash LED board schematic	1	323507	03	24/11/2009
Main PCB BOM	2	324389	03	24/11/2009
Keypad PCB BOM	2	323878	04	24/11/2009
Flash LED board BOM	1	323868	02	24/11/2009
Main PCB Layout	17	325886	03	24/11/2009
Keypad PCB Layout	5	323465	04	24/11/2009
Flash LED board PCB Layout	5	323508	03	24/11/2009
Label Drawing	1	325998	01	08/12/2009

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