



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 09.0027X issue No.:2

Status: **Current**

Date of Issue: 2011-09-22

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Certificate history:

Issue No. 2 (2011-9-22)
Issue No. 1 (2011-7-18)
Issue No. 0 (2009-12-15)

Applicant: **Extronics Limited**
1 Dalton Way,
Midpoint 18,
Middlewich,
Cheshire, UK.
CW10 0HU
United Kingdom

Electrical Apparatus: **iCAM501 & iCAM501U Intrinsically Safe Digital Camera**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Extronics Ltd**
IECEX ITS 09.0027X
Ex ia IIB T4 Ga
Ex ia IIC T4 Gb
-20°C < Ta < +60°C
Ex ia I Ma
0°C < Ta < +60°C

Approved for issue on behalf of the IECEx
Certification Body:

V K Varma

Position:

Certification Officer

Signature:
(for printed version)

Date:

Vijay K. Varma
2011-09-22

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





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Manufacturer: **Extronics Limited**
1 Dalton Way,
Midpoint 18,
Middlewich,
Cheshire, UK.
CW10 0HU
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-26 : 2006 Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

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

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/ITS/ExTR09.0039/00

GB/ITS/ExTR09.0039/01

GB/ITS/ExTR09.0039/02

Quality Assessment Report:

GB/SIR/QAR08.0025/02



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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 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 and Temperature Class T4 in an upper ambient temperature of +60° C. Changing the batteries in Group II hazardous areas 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.

USB Interface: Um = 250V ac

The iCAM501U version of the camera may also be used in Group I applications, with reduced ambient temperature range $0^{\circ}\text{C} \leq T_a \leq 60^{\circ}\text{C}$.

CONDITIONS OF CERTIFICATION: YES as shown below:

For Group II applications only, 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.

For Group I applications, the changing of the batteries in the hazardous area and the transportation of spare batteries into the hazardous area is not permitted.

The USB port shall only be connected in the non-hazardous area.

If the camera is damaged in any way, it shall be removed from the hazardous area



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1:

Additional use of alternative flash LED device

Special conditions of safe use amended to match ATEX certificate.

Issue 2:

Use of a new enclosure material

Addition of Group I and associated special condition for safe use

Additional model number iCAM501U

Minor drawing modifications