

[1] **EC-TYPE EXAMINATION CERTIFICATE**

according to Directive 94/9/EC, Annex III

(Translation)



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC

[3] EC-Type Examination Certificate Number: **IBExU06ATEX1021**

[4] Equipment: USB-photo camera  
type ELBCam1

[5] Manufacturer: E.L.B. Ex-Geräte Bachmann GmbH & Co. KG

[6] Address: An der Hartbrücke 8  
64625 Bensheim  
Germany

[7] The equipment mentioned in [4] and any acceptable variation thereto are specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23<sup>rd</sup> 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the test report IB-05-3-371 of 26<sup>th</sup> January 2006.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2004 and E IEC 60079-11:2004.

[10] If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified under [17] in the schedule to this EC-Type Examination Certificate.

[11] This EC-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this directive apply to the manufacture and supply of this equipment.

[12] The marking of the equipment mentioned in [4] shall include the following:

**Ex II 2G Ex ia IIC T4**  
-20 °C ≤ T<sub>a</sub> ≤ +50 °C

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Authorised for certifications Explosion protection

Freiberg, 27<sup>th</sup> January 2006

By order

(Dr. Lösch)



Certificates without signature and seal are not valid.  
Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

**Schedule**

[13]

**Schedule**

[14]

**to the EC-TYPE EXAMINATION CERTIFICATE IBExU06ATEX1021**

[15]

**Description of equipment**

The USB-photo camera is a hand-held intrinsically safe apparatus which serves for recording and storing of photos in explosive areas. It consists of a plastic housing with a view-finder and 2 LED. The camera is supplied by 2 Alkaline primary cells size AAA, which must be replaced only outside of the hazardous area.

**Electrical data**

internal supply electrical circuit

Operating voltage: 2 x 1.5 V Alkaline primary cell, size AAA (Micro)

Safety technical notes

- In the hazardous area the battery and USB cover must be locked by the safety bag.
- Any access to the battery holder or the USB plug is inadmissible in the hazardous area.
- Only the battery types listed in the operating manual are to be used.
- After exchanging the battery the camera function must be checked outside of the hazardous area.

[16]

**Test report**

The test results are recorded in the test report IB-05-3-371 of 26<sup>th</sup> January 2006. The test documents are components of the test report and listed there.

Summary of the Test Result:

The USB-photo camera Type ELBCam1 fulfils the requirements of the Type of protection Intrinsic Safety for an explosion-proof electrical apparatus for Equipment Group II, Category 2G, Explosion Group of IIC, Level of Protection ia and Temperature Class T4.

[17]

**Special conditions**  
none

[18]

**Essential Health and Safety Requirements**

Confirmed by norms (see [9]).

By order

Freiberg, 27<sup>th</sup> January 2006



(Dr. Lösch)