



# 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](http://www.iecex.com)

Certificate No.:	IECEx ZLM 09.0002X	issue No.:1	Certificate history: Issue No. 1 (2011-2-23) Issue No. 0 (2009-4-19)
Status:	Current		
Date of Issue:	2011-02-23	Page 1 of 4	
Applicant:	<b>ecom instruments GmbH</b> Industriestrasse 2 97959 Assamstadt <b>Germany</b>		
Electrical Apparatus:	LED-Flashlight Type Lite-Ex PL*		
<i>Optional accessory:</i>			
Type of Protection:	Intrinsic safety 'ia', Intrinsic safety 'iaD', optical radiation 'op is'		
Marking:	Ex ia op is IIC T4 Ga and Ex ia IIIC T 130°C Da IP65 Tamb -20°C to +50°C		
<i>Approved for issue on behalf of the IECEx Certification Body:</i>	Dipl.-Ing. Harald Zelm		
<i>Position:</i>	Head of Certification Body		
<i>Signature: (for printed version)</i>	_____		
<i>Date:</i>	_____		

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](http://www.iecex.com).

Certificate issued by:

**ZELM Explosionsschutz GmbH**  
 Siekgraben 56  
 D-38124 Braunschweig  
 Germany





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Manufacturer: **ecom instruments**  
Industriestrasse 2  
97959 Assamstadt  
**Germany**

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 product 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 identity documents, was found to comply with the following standards:

<b>IEC 60079-0 : 2007-10</b> Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-11 : 2006</b> Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-26 : 2006</b> Edition: 2	Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga
<b>IEC 60079-28 : 2006-08</b> Edition: 1	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
<b>IEC 61241-0 : 2004</b> Edition: 1	Electrical apparatus for use in the presence of combustible dust - Part 0: General requirements
<b>IEC 61241-11 : 2005</b> Edition: 1	Electrical apparatus for use in the presence of combustible dusts - Part 11: Protection intrinsic safety 'ID'

*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:

[DE/ZLM/ExTR09.0002/01](#)

Quality Assessment Report:

[DE/PTB/QAR07.0004/00](#)

[DE/PTB/QAR07.0004/01](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The LED-Flashlight Type Lite-Ex PL\* serves as a handheld, portable equipment for use in hazardous areas zone 0 and 1 and zone 20 and 21. The "\*" in the type designation denotes a two-digit number sequence that indicates alternative versions.

The unit is made of an aluminium housing consisting of several pieces, which in turn is enclosed by an exterior plastic housing. The plastic housing is electrostatically conductive.

The power for the Light emitting diodes is supplied by appropriate primary batteries.

### CONDITIONS OF CERTIFICATION: YES as shown below:

It is not allowed to open the housing inside the hazardous area

The integral batteries may only be replaced outside the hazardous area and only with battery types approved by the manufacturer.

A visual and functional examination must be conducted at regular intervals to ensure that the flashlight is in an intact exterior condition. In the event of flat batteries or visible damage, the flashlight must be removed out of the hazardous area.

The safety instructions provided by the manufacturer has to be observed.



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

This new issue was necessary, because of the introduction of a new LED-Flashlight type Lite-Ex PL 10. The Lite-Ex PL 10 is a smaller version of the Lite-Ex PL \*. The new type is also powered by appropriate primary batteries.

