



# 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 FTZU 14.0030X** Issue No: 0 Certificate history:  
Status: **Current** Page 1 of 3 Issue No. 0 (2014-11-25)  
Date of Issue: **2014-11-25**  
Applicant: **Ion Science Ltd.**  
**The Way**  
**Fowlmere**  
**Cambridge**  
**SG8 7UJ**  
**United Kingdom**  
Electrical Apparatus: **Benzene monitor type EWF 1.1**  
*Optional accessory:*  
Type of Protection: **flameproof enclosure**  
Marking: **Ex d IIB+H2 T4 Gb**

*Approved for issue on behalf of the IECEx  
Certification Body:*

Head of Certification Body

*Position:*

Dipl. Ing. Lukáš Martinák

*Signature:  
(for printed version)*

*Date:*

*Jaroslav*  
2014-11-25



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:

Fyzikálně technický zkušební ústav  
(Physical -Technical Testing Institute)  
Pikartská 7  
71607 Ostrava - Radvanice  
Czech Republic





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Manufacturer: **Ion Science Ltd.**  
The Way  
Fowmere  
Cambridge  
SG8 7UJ  
United Kingdom

Additional 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 : 2011 Explosive atmospheres - Part 0: General requirements  
Edition:6.0

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:6

*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:

[CZ/FTZU/ExTR14.0030/00](#)

#### Quality Assessment Report:

[GB/BAS/QAR07.0023/05](#)





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## Schedule

### EQUIPMENT:

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

The benzene monitor type EWF1.1 is designed to detect benzene concentrations.

The equipment is consist of the steel enclosure with dural threaded cover with sight glass. The steel enclosure with breathing devices is separately certified as Ex component - Empty flame proof enclosure, certificate IECEx FTZÚ 14.0023U.

The equipment is equipped with three breathing devices which are intended for sampling, exhaust and for enclosure breathing and two 3/4" NPT threaded holes.

An appropriate certified Ex equipment cable glands for direct entry must be used.

The equipment contains two heating systems, internal temperature regulation and separator temperature regulation.

The performance tests were not carried out according to the IEC 60079-29-1.

Rated voltage: 19 VDC to 32 VDC

Rated current: 2.4 A to 4 A

Power consumption dependents on the temperature control systems.

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

1. Ambient temperature range:  $-20^{\circ}\text{C} \leq T_a \leq +55^{\circ}\text{C}$ .

2. Verified values of the maximum gaps and minimum constructional length of flameproof joints

of this enclosure are different from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.



