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 SIR 15.0040X	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2015-09-14**	Page 1 of 4	

Applicant: **General Monitors Ireland Limited**
Ballybrit Business Park
Galway
Ireland

Electrical Apparatus: **Gassonic SB100 Ultrasonic Tester**
Optional accessory:

Type of Protection: **Flameproof, Intrinsically Safe and Dust Protection by Enclosure**

Marking: Ex d ia IIB+H_2 T4 Gb
Ex ia tb IIIC T135°C Db
Ta = -20°C to +50°C

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)

Date: 2015-09-14

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:
SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden
Deeside
CH5 3US
United Kingdom

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Manufacturer: **General Monitors Ireland Limited**
Ballybrit Business Park
Galway
Ireland

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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2013 Edition: 2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*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/SIR/ExTR15.0243/00

Quality Assessment Report:

GB/SIR/QAR07.0014/05 US/UL/QAR10.0004/03

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Schedule

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

The Gassonic SB100 is a battery operated, rechargeable Ultrasonic Tester that has a rated output of 12 VDC 10 W max. It is specifically designed to test Gassonic Ultrasonic Gas Leak Detectors through a high-energy, ultrasonic radiation source that emits sufficient ultrasonic energy to activate Ultrasonic Gas Leak Detectors. The SB100 is constructed from cast aluminium alloy and incorporates an IS interface board that provides intrinsically safe outputs to the APEM piezo switch used to operate the equipment, a driver board and a nickel metal hydride battery assembly.
The enclosure includes a main housing that provides threaded openings for a 4½-16 UN–2A/2B threaded cover at one end, a M16x1.5 6H/6g threaded brass with nickel plating stopping plug to gain access to a jack plug and an M22x1.5 6H/6g threaded aluminium piezo switch assembly which includes a cemented feed through bushing and an intrinsically safe piezo switch. The enclosure and cover are secured against loosening by a ¼" long #4-40 18-8 stainless steel hex socket screw, the stopping plug by a 10mm hex key, and the piezo switch by the use of a special tool at the manufacturer's facility.
The SB100 tester provides the incorporated intrinsically safe APEM piezo switch, having entity parameters, with intrinsically safe outputs through the cemented bushing. The Um value at the charging socket is set to Um = 14.4VDC.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The end user shall ensure that the certified stopping plug is installed in the charging port prior to the equipment being used in a hazardous area.
2. The equipment shall only be charged using a charger specifically supplied for use with the unit (for example part number FW7300 / MH2-12, manufactured by FRIWO Geraetebau GmbH), approved as SELV or Class 2 equipment against IEC 60950 or IEC 61010-1 or an equivalent IEC standard (or a national standard based on the IEC standard). The maximum voltage from the charger shall not exceed 14.4 Vdc.

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EQUIPMENT(continued):

The Manufacturer shall comply with the following:

1. The SB100 equipment incorporates a previously certified intrinsically safe piezo switch assembly by APEM, model number PBAR1AFB000A0BX, which includes an illuminating LED ring. This component is certified within certificate INERIS 07ATEX0043X/02. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification and the manufacturer shall inform Sira of any modifications of the equipment that may impinge upon the intrinsic safety design of the product (including the use of 'equivalents' – different components), as stated in the report tied to the certificate for all safety components.
2. The equipment shall be supplied with threaded blanking plugs that have been selected with due regard to the current state of technical knowledge of explosion protection and have been suitably certified for the application.