



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 BAS 18.0035X

Issue No: 1

Certificate history:

Issue No. 1 (2019-09-05)

Issue No. 0 (2018-08-22)

Status: **Current**

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Date of Issue: **2019-09-05**

Applicant: **Sensear Pty Limited**
197-199 Great Eastern Highway,
Belmont,
WA,
6104
Australia

Equipment: **SM1P Headset**

Optional accessory: *MFP00148 Boom Microphone; SMBM0002 Throat Microphone; SRCK61XXCCXXSM1P Ex Interface Cable*

Type of Protection: **Intrinsic Safety**

Marking:

With BAT00003:
Ex ia I Ma (-20°C ≤ Ta ≤ +60°C)
Ex ia IIC T3 Ga (-20°C ≤ Ta ≤ +40°C)

With BAT00005:
Ex ib I Mb (-20°C ≤ Ta ≤ +60°C)
Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +40°C)
Ex ib IIC T155°C Db (-20°C ≤ Ta ≤ +40°C)

Notation:

SM1PO2 Ex Series fitted with this Battery

Approved for issue on behalf of the IECEx

R S Sinclair

Certification Body:

Position:

Technical Manager

Signature:

(for printed version)

Date:

RS Sinclair
5-9-19

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:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





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Manufacturer: **Sensear Pty Limited**
197-199 Great Eastern Highway,
Belmont,
WA,
6104
Australia

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 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 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

*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/BAS/ExTR18.0115/00](#)

[GB/BAS/ExTR19.0166/00](#)

Quality Assessment Report:

[AU/TSA/QAR10.0006/07](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Type SM1P Electronic Ear-Muff is a battery powered, noise cancelling, headphone set designed to reduce background noise. It consists of two, plastic, ear cups each of which contains a speaker. Attached to the left-hand ear cup is a boom microphone, assembly number MFP00148 or throat microphone SMBM0002. These are plugged into a connector mounted in the left-hand ear cup enclosure wall. Small microphones are also mounted in both the left-hand side and the right-hand side enclosure walls, one in each. The right-hand, ear cup has a compartment with a lid which contains two connectors, i.e. a USB connector and a 3.5 mm stereo connector. A connector mounted in the right-hand, ear cup enclosure wall is used to optionally connect an external radio via a separate, cable mounted, interface unit identified as an SRCK61XXCCXX SM1P Ex Interface Cable, this interface being associated with, and certified as part of, this equipment. The SRCK61XXCCXX Interface Cable has the following intrinsic safety parameters at the radio connector:

IIB	IIC	IIIC
Ui = 8.4V	8.4V	8.4V
Ci = 0.15µF	0.15µF	0.15µF
Li = 0uH	0uH	0uH
Uo = 4.1V	4.1V	4.1V
Io = 7.7mA	7.7mA	7.7mA
Po = 6mW	6mW	6mW
Co = 1,000uF	100uF	100uF
Lo = 1,000mH	600mH	600mH

The following models are covered by this certificate:

SM1PBase Model - All Features

SM1PW	- No cabled Connection to any other device. Bluetooth® only
XBT	- No Cable, No Short Range Radio – Just Bluetooth®
SM1PDP	- Same as base Model: removes large speaker – adds earplugs with transducers
SM1B	- No Short Range Radio, No Bluetooth®
SM1PWDP	- No cable connection, removes large speaker - adds earplugs with transducers

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Potential Electrostatic hazard, clean with damp cloth only
2. The operating ambient temperature range is: -20°C to +60°C for Group I and: -20°C to +40°C for Group IIC and IIIC



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

Variation 1.1

To permit the following changes:

Introduction of the new model model type SM1PWDP

The alternative use of battery type BAT00005 with corresponding Certification Marking for both Gas and Dust

ExTR: GB/BAS/ExTR19.0166/00

File Reference: 19/0234