# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION
### IEC Certification System for Explosive Atmospheres
for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx BAS 18.0035X**

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Certificate history:
Issue 2 (2021-08-04)
Issue 1 (2019-09-05)
Issue 0 (2018-08-22)

Status: **Current**

Issue No: 3

Date of Issue: 2023-03-07

Applicant: **Sensear Pty Limited**
4 Hehir Street,
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 IIIC T155°C Db (-20°C ≤ Ta ≤ +40°C)**

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

Position: **Technical Manager**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

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

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Certificate No.: **IECEx BAS 18.0035X** Page 2 of 4

Date of issue: 2023-03-07 Issue No: 3

Manufacturer: **Sensear Pty Limited**
4 Hehir Street,
Belmont, WA, 6104
**Australia**

Manufacturing locations: **Sensear Pty Limited**
4 Hehir Street,
Belmont, WA, 6104
**Australia**

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with 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 Reports:

GB/BAS/ExTR18.0115/00 GB/BAS/ExTR19.0166/00 GB/BAS/ExTR21.0136/00
GB/BAS/ExTR22.0205/00

Quality Assessment Report:

AU/TSA/QAR10.0006/11

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**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, or to other EX approved devices with a separate Cable interface unit identified as SRCK62XXCCXX, this interface being associated with, and certified as part of, this equipment.

The SRCK61XXCCXX and SRCK62XXCCXX Interface Cables have the following intrinsic safety parameters at the connectors:

Ui = 9V
Ii = 2.22A (not a limiting factor)
Pi = 1.3W
Ci = 0.09uF
Li = 0uH

The following models are covered by this certificate:

| | |
|---|---|
| SM1P | Base 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 |

| With BAT00003 | With BAT00005 |
|---|---|
| Ex ia I Ma (-20°C ≤ Ta ≤ +60°C) | Ex ib I Mb (-20°C ≤ Ta ≤ +60°C) |
| Ex ia IIC T3 Ga (-20°C ≤ Ta ≤ +40°C) | Ex ib IIC T4 Gb (-20°C ≤ Ta ≤ +40°C) |
| | Ex ib IIIC T155°C Db (-20°C ≤ Ta ≤ +40°C) |

**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 3.1**

To permit new PCBs and revised terminal parameters.

| | |
|---|---|
| ExTR: **GB/BAS/ExTR22.0205/00** | File Reference: **22/0490** |