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**

Page 1 of 4

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

Status: **Current**

Issue No: 2

Date of Issue: 2021-08-04

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 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: 04/08/2021

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

IECEx Certificate of Conformity

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

Date of issue: 2021-08-04 Issue No: 2

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

Additional manufacturing locations:

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

Quality Assessment Report:

AU/TSA/QAR10.0006/09

IECEx Certificate of Conformity

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:

I	IIC	IIIC
U_i = 8.4V	8.4V	8.4V
C_i = 0.1µF	0.1µF	0.1µF
L_i = 0µH	0µH	0µH
I_i = 0.42A	0.42A	0.42A
P_i = 1.3W	1.3W	1.3W
U_o = 4.1V	4.1V	4.1V
I_o = 7.7mA	7.7mA	7.7mA
P_o = 6mW	6mW	6mW
C_o = 1,000uF	100uF	100uF
L_o = 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

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Variation 2.1

This issue permits additional entity parameters and confirms the current design meets the requirements of EN IEC 60079-0:2018.

ExTR: **GB/BAS/ExTR21.0136/00**	File Reference: **21/0525**