



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 EPS 20.0026X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 1 Issue 0 (2020-05-12)
Date of Issue: 2021-03-29
Applicant: **i.safe MOBILE GmbH**
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
Germany
Equipment: **IS-RSM2.1, IS-RSMG2.1 Intrinsically safe Remote Speaker Microphone**
Optional accessory:
Type of Protection: **Intrinsic safety "i"**
Marking:

IS-RSM2.1	IS-RSMG2.1
Ex ib IIC T4 Gb	Ex ib IIC T4 Gb
Ex ib IIIC T135°C Db	

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:



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:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany





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Page 2 of 4

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Manufacturer: **i.safe MOBILE GmbH**
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
Germany

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 Report:

[DE/EPS/ExTR20.0022/01](#)

Quality Assessment Report:

[DE/EPS/QAR12.0003/10](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX EPS 20.0026X**

Page 3 of 4

Date of issue: 2021-03-29

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The intrinsically safe Remote Speaker Microphone is for the rugged use in explosion hazardous areas. The device has a PTT button and a volume control button. The IS-RSM is connected, outside hazardous areas, via the wired connection to the ISM interface of a mobile device (Plug and Play). This allows professional use of Push-to-talk. It is equipped with an amplified loudspeaker and a microphone.

The Remote Speaker Microphone is available in two variants:
IS-RSM2.1 and IS-RSMG2.1 with higher volume level

IS-RSM2.1

The IS-RSM2.1 is approved for use in explosion hazardous areas of zone 1 and 21.

Electrical data:

Supply:

The Remote Speaker Microphone IS-RSM2.1 will be supplied over the 13-pin ISM-Interface. No extra battery is needed.

Interfaces:

The device has a wired 13-pin connector. This must be connected outside hazardous areas to an ISM-interface developed in accordance with document 1029AD04 and may be operated within hazardous areas of zones 1 and 21.

The device has a 3.5 mm audio jack. The IS-EP1.1 or intrinsically safe accessories approved by i.safe MOBILE that comply with the following connection parameters may be connected to these within hazardous areas (the contacts are intrinsically safe for gas and dust):

Output voltage (spark):	$U_{o,spark}$	=	8.7 V
Output voltage (thermal):	$U_{o,thermal}$	=	5.288 V
Output current (spark):	$I_{o,spark}$	=	0.837 A
Output current (thermal):	$I_{o,thermal}$	=	0.424 A
Output power (thermal):	$P_{o,thermal}$	=	673 mW
Effective internal capacitance:	C_i	=	negligible
Effective internal inductance:	L_i	=	negligible
Permissible input voltage (spark):	$U_{i,spark}$	=	8.7 V
Permissible input voltage (thermal):	$U_{i,thermal}$	=	5.288 V
Permissible input power:	P_i	=	0 W

Only accessories without internal battery may be connected to the 3.5 mm audio jack.

Permissible Lo/Co combinations:

Lo [mH]	0.100	0.050	0.020	0.010	0.005
Co [μ F]	1.400	2.300	3.500	4.800	5.900

IS-RSMG2.1

The IS-RSMG2.1 is approved for use in explosion hazardous areas of zone 1.

Electrical data:

Supply:

The Remote Speaker Microphone IS-RSMG2.1 will be supplied over the 13-pin ISM-Interface. No extra battery is needed.

Interfaces:

The device has a wired 13-pin connector. This must be connected outside hazardous areas to an ISM-interface developed in accordance with document 1029AD04 and may be operated within hazardous areas of zone 1.

A connection to the 3.5 mm audio jack connector is not allowed inside hazardous area.

SPECIFIC CONDITIONS OF USE: YES as shown below:

The permitted ambient temperature range is -20 °C to +60 °C.



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Certificate No.: **IECEX EPS 20.0026X**

Page 4 of 4

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
RSMG2.1 added.