

Michelle Halliwell

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx SIR 20.0036X** Page 1 of 5

Issue 1 (2022-09-12) Issue No: 2 Status: Current Issue 0 (2021-04-28)

2025-08-29 Date of Issue:

BARTEC GmbH Applicant:

Max Eyth Straße 16 97980 Bad Mergentheim

Germany

Equipment: Pixavi Thermal, Pixavi Phone and Pixavi Cam (17-S13*-1***/*******)

Optional accessory:

Type of Protection: Intrinsically Safe ib and Intrinsically Safe Dust ib

Marking: Ex ib IIC T4 Gb

Ex ib IIIC T135°C Db Ta = -20°C to +60°C

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Senior Director of Operations**

Signature:

(for printed version)

(for printed version)

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 The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate history:

Certificate issued by:

CSA Group Testing UK Ltd Unit 6, Hawarden Industrial Park Hawarden, Deeside CH5 3US **United Kingdom**





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Manufacturer: BARTEC GmbH

Max Eyth Straße 16 97980 Bad Mergentheim

Germany

Manufacturing

locations:

BARTEC GmbH Max Eyth Straße 16

97980 Bad Mergentheim

Germany

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/SIR/ExTR21.0068/00 GB/SIR/ExTR22.0116/00 GB/SIR/ExTR25.0076/00

Quality Assessment Report:

DE/TUN/QAR06.0017/15



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Pixavi Cam, Phone and Thermal are handheld communication devices featuring a high-resolution touch display, cameras including infrared/thermal option, speakers and microphones, divergent LED flashlight, SIM and SD card connector and communication interfaces for Wi-Fi, Bluetooth, NFC, GNSS and LTE, UMTS, and GSM networks.

The enclosure is constructed from aluminium, with toughened glass windows and a front/back parts made from plastics.

Electrical interfaces are designed to be intrinsically safe.

Entity parameters

IEC Parameters	USB	SIM (1&2)	SD	Unit
Uo	5.45	5.45	5.45	V
lo	2.81	1.20	7.04	Α
Po	0.84	0.41	2.59	W
Co	N/A	27.40	39.30	μF
Lo	N/A	24.97	0.72	μΗ

Um (non-hazardous area connection only) 12V

Model types

- Pixavi Thermal
- Pixavi Phone
- Pixavi Cam

Type:

17-S13*-1***/******

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1. The USB port shall only be used for charging the equipment when in the non-hazardous area. The equipment shall only be charged using a charger specifically supplied for use with the unit, part number G7-S0Z0-0001 G7-S0Z0-0004 or other approved accessories specified by Bartec GmbH. The maximum input voltage (Um) from the charger between the lines is nominal 12 V. The ambient temperature during charging shall be in the range 0°C to 45°C.
- 2. The USB port is also used for data download. The port has been assessed with a Um of 12 V and shall be installed in accordance with IEC 60079-14/EN 60079-14.
- 3. Care shall be taken to avoid the risk of drop and impact during storage, transportation and use as aluminium is present in the structure of the enclosure.
- 4. The apparatus shall not be subjected to a prolific charge generating mechanism (such as might occur in pneumatic transfer of powders or charge spraying in a powder coating process).
- 5. The battery pack surfaces shall at regular intervals be checked for wear and tear by the user. Replace with type: 17-S1Z0-0001/**** if damaged.
- 6. Do not remove the battery pack in the hazardous area.

^{*} Different type codes for each product variant



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Equipment (continued):

Conditions of Manufacture

1. The manufacturer shall maintain an encapsulation thickness of 1mm minimum.

2. Measures to prevent voids in the compound shall be defined for the encapsulation process.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following change:

1. To amend the special conditions with respect to the following:

Reference to IEC/EN 60079-14 made more generic. Separation of the battery pack in a hazardous area. Antistatic precautions with respect to the screen protector and battery case.

Issue 2 – this Issue introduced the following change:

1. To permit circuit and PCB changes to the battery board not affecting the previous assessment.