



# 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](http://www.iecex.com)

Certificate No.: **IECEX SIR 20.0036X** Page 1 of 4 [Certificate history:](#)  
Issue 0 (2021-04-28)

Status: **Current** Issue No: 1

Date of Issue: 2022-09-12

Applicant: **BARTEC GmbH**  
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:

**Michelle Halliwell**

Position:

**Director Operations, UK & Industrial Europe**

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](http://www.iecex.com) or use of this QR Code.



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](#)

Quality Assessment Report:

[DE/TUN/QAR06.0017/13](#)



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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.

**For Entity parameters refer to the Annexe**

Model types

- Pixavi Thermal
- Pixavi Phone
- Pixavi Cam

Type:

17-S13\*\_1\*\*\*/\*\*\*\*\*

\* Different type codes for each product variant

## 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 ( $U_m$ ) 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  $U_m$  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.



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

**This issue, Issue 1, recognises the following changes; refer to the certificate annex to view a comprehensive history:**

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.

**Annex:**

[IECEX SIR 20.0036X Issue 1 Annexe.pdf](#)

Annexe to: IECEx SIR 20.0036X Issue 1

Applicant: BARTEC GmbH

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



## Entity parameters

IEC Parameters	USB	SIM (1&2)	SD	Unit
U <sub>o</sub>	5.45	5.45	5.45	V
I <sub>o</sub>	2.81	1.20	7.04	A
P <sub>o</sub>	0.84	0.41	2.59	W
C <sub>o</sub>	N/A	27.40	39.30	μF
L <sub>o</sub>	N/A	24.97	0.72	μH

U<sub>m</sub> (non-hazardous area connection only) 12V

## Conditions of Manufacture

- i. The manufacturer shall maintain an encapsulation thickness of 1mm minimum.
- ii. Measures to prevent voids in the compound shall be defined for the encapsulation process.

## Full certificate change history

Issue 1 – this Issue introduced the following change:

- i. 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.