



# 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 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2021-04-28  
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:

**Neil Jones**

Position:

**Certification Manager**

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



Certificate issued by:

**SIRA Certification Service**  
**CSA Group**  
**Unit 6, Hawarden Industrial Park**  
**Hawarden, Deeside, CH5 3US**  
**United Kingdom**

**sira**  
CERTIFICATION





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Page 2 of 3

Date of issue: 2021-04-28

Issue No: 0

Manufacturer: **BARTEC GmbH**  
Max Eyth Straße 16  
97980 Bad Mergentheim  
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:

[GB/SIR/ExTR21.0068/00](#)

Quality Assessment Report:

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



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Page 3 of 3

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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. The display glass window is protected with a film in order to ensure anti-static compliance.

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 clause 12.2.1 of IEC 60079-14:2007.
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 apparatus shall only be used with the supplied screen protection film. The rear anti-static coating shall be inspected before use, see user instructions.

## Annex:

[IECEX SIR 20.0036X Issue 0 Annexe.pdf](#)

Annexe to: IECEx SIR 20.0036X Issue 0

Applicant: BARTEC GmbH

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



### Entity parameters

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

Um (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.