



**ACCREDITED TEST LABORATORY**  
**IN TERMS OF THE ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"**

**INSPECTION AUTHORITY CERTIFICATE**

**BARTEC SAFETY (PTY) LTD.**  
**P.O. BOX 58071**  
**NEWVILLE**  
**2114**

**Issued: 2021/05/04**  
**Expire: 2024/05/04**  
**Revision: 0**  
**Job File: 1361**

**Equipment:** Pixavi Thermal, Pixavi Phone and Pixavi Cam  
**Manufacturer:** BARTEC GmbH  
**Address:** Max Eyth Straße 16, 97980 Bad Mergentheim, Germany.  
**Model/Type:** 17-S13\*-1\*\*\*/\*  
**Serial No.:** Units imported between Issued and Expiry dates.

Applicant:

**BARTEC SAFETY (PTY) LTD.**

Inspection Authority Number: **MTEEx-S/21.0188 X**



**Ex Rating:** Ex ib IIC T4 Gb  
Ex ib IIIC T135°C Db  
Ta = -20°C to +60°C

**Standards used:**

<b>SANS 60079-0: 2019 Ed.6</b> <b>IEC 60079-0: 2017 Ed.7</b>	<b>Explosive atmospheres – Part 0: General requirements.</b>
<b>SANS 60079-11: 2012 Ed.4</b> <b>IEC 60079-11: 2011 Ed.6</b>	<b>Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i".</b>

*This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 8(1) of the Occupational Health and Safety Act, provided that the apparatus is used as prescribed in accordance with:*

- 1) Any conditions set out in this Certificate;*
- 2) This certificate only covers equipment imported between the "Issued" and "Expiry" dates;*
- 3) When the supporting Q.A.N. (Quality Assurance Notification) of the equipment manufacturer expires, it is the responsibility of the applicant (as mentioned above) to submit a valid Q.A.N to MTEEx Laboratories.*

Reviewed by + signature (ExTL):	H. de Wet	
Approved by + signature (ExCB): (MTEEx Laboratories Technical Signatory)	D. Young	

4) *The test results presented in this Ex Test Report relate only to the item or product tested.*

## 1. OVERVIEW

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 aluminum, 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.

Model types

- Pixavi Thermal
- Pixavi Phone
- Pixavi Cam

Type: 17-S13\*-1\*\*\*/\*\*\*\*\*

\* Different type codes for each product variant.

## 2. REASON FOR REVIEW

- ARP 0108 Requirement.

## 3. DOCUMENTATION PROVIDED

- IECEx Certificate of Conformity (IECEx SIR 20.0036 X Issue 0).
- EU Type Examination Certificate (CSANe 20 ATEX 4223 X Issue 0).
- IEC Quality Assessment Report (DE/TUN/QAR06.0017/13).

## 4. ELECTRICAL / SAFETY PARAMETERS

### 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

## 5. INSTALLATION INSTRUCTIONS

The instructions provided with the product shall be followed in detail to assure safe operation.

## 6. CONDITIONS OF MANUFACTURE

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

## 7. CONDITIONS OF CERTIFICATE (X)

- 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.
- 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.
- Care shall be taken to avoid the risk of drop and impact during storage, transportation and use as aluminum is present in the structure of the enclosure.
- 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).
- 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.

## 8. INSTALLATION INSTRUCTIONS

None.

## 9. MARKING

**For validity purposes, the following marking must be added to all equipment covered by this certificate:**

**Manufacturer:** BARTEC GmbH.  
**Supplier:** BARTEC Safety (Pty) Ltd.  
**Equipment:** Pixavi Thermal, Pixavi Phone and Pixavi Cam  
**Model/Type:** 17-S13\*-1\*\*\*/\*\*\*\*\*  
**IA Number:** MTEEx-S/21.0188 X  
**Ex Rating:** Ex ib IIC T4 Gb  
Ex ib IIIC T135°C Db  
Ta = -20°C to +60°C

**Serial No.:** -----

**Note: It is the responsibility of the supplier to ensure that the marking label complies to the ARP 0108.**

### MTEEx Laboratories

Note: This document may not be reproduced except in full.

MTEEx Laboratories takes no responsibility for any non-conforming tests / assessments / results which is not in compliance with the relative Standards. By marking the equipment as mentioned in the documentation, the manufacturer takes full responsibility that the equipment has indeed complied with the original type assessment and has been subjected to any routine verification(s) / test(s) respectively.

### End of Certificate