



## EU-TYPE EXAMINATION CERTIFICATE

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **CSANe 20ATEX4223X** Issue: **3**

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

Manufacturer: **BARTEC GmbH**

Address: **Max-Eyth-Straße 16  
97980 Bad Mergentheim  
Germany**

This product and any acceptable variation thereto, is specified in the schedule to this certificate and the documents therein referred to.

CSA Group Netherlands B.V., Notified Body No. 2813 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in item 16.2.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018      EN 60079-11:2012

Where additional criteria beyond those given here have been used, they are listed in item 18 in the Schedule.

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed in item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product, these are not covered by this certificate.

The marking of the product shall include the following (additional marking is provided in the Schedule as a part of item 15, if applicable):



II 2G Ex ib IIC T4 Gb  
II 2D Ex ib IIIC T135°C Db  
Ta = -20°C to +60°C

Signed: M Halliwell  
Title: Senior Director of Operations  
Date: 29 August 2025



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## SCHEDULE

13

14 EU-Type Examination Certificate Number: CSANe 20ATEX4223X Issue: 3

15 Description:

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.

Models

- Pixavi Thermal
- Pixavi Phone
- Pixavi Cam

Type:

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

\* Different type codes for each product variant

### 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

Variation 1 - This variation introduced the following change:

- 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.

Variation 2 - This variation introduced the following change:

- To permit circuit and PCB changes to the battery board not affecting the previous assessment.
- Reintroduce Conditions of Manufacture previously listed on the original certificate.

16 Drawings and documents:

16.1 Technical documents:

Refer to Certificate Annex.

16.2 Associated reports and certificate history:

Issue	Date	Report number	Comment
0	28 April 2021	R80042091A	The release of the prime certificate.
1	12 September 2022	R80135082A	The introduction of Variation 1.



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Issue	Date	Report number	Comment
2	28 April 2023	N/A	The marking Section was amended to correct a typographical error.
3	29 August 2025	R80244054A	The introduction of Variation 2.

**17 Specific conditions of use** (denoted by "X" after the certificate number):

- 17.1 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.
- 17.2 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.
- 17.3 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.
- 17.4 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).
- 17.5 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.
- 17.6 Do not remove the battery pack in the hazardous area.

**18 Essential health and safety requirements of Annex II (EHSRs):**

The relevant EHSRs that are not addressed by the standards listed in item 9 of this certificate have been identified and conformity of the product demonstrated in the reports listed in item 16.2.

**19 Remarks and additional information:**

The use of this certificate is subject to the regulations applicable to holders of CSA Group Netherlands B.V. certificates.

Compliance of the product with the applicable safety requirements of the relevant industrial standards has not been verified and is not covered by this certificate.

**19.1 Conditions of manufacture:**

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





## Certificate Annexe

### Document History

#### Issue 0

##### Documents Introduced or Revised

Drawing	Sheets	Rev.	Date (Stamp)	Title
11-S130-6A0001	1 of 1	-	09 Apr 21	X8K_Documentation_overview
11-S130-650003	1 of 1	00	07 Apr 21	X8K-SD04-ITEX_IECEX_Label
11-S130-650001	1 of 1	00	03 Mar 21	X8K-SD02-Exploded_Assembly
11-S130-650002	1 of 1	00	03 Mar 21	X8K-SD01-General_Assembly
11-S130-650007	1 of 1	00	03 Mar 21	X8K-SD07-Screen_Protector
11-S130-650010-SCH	1 to 9	C	03 Mar 21	X8K_Main_Board
11-S130-650011-SCH	1 of 1	E	09 Apr 21	X8K_Battery_Board
11-S130-650012-SCH	1 of 1	D	03 Mar 21	X8K_Charging_Rigid_Flex_Board
11-S130-650013-SCH	1 of 1	C	03 Mar 21	X8K_Flex_USB_Board
11-S130-650014-SCH	1 of 1	C	03 Mar 21	X8K_Flex_Display_Board
11-S130-650015-SCH	1 of 1	D	03 Mar 21	X8K_Flex_SIM_Board
11-S130-650016-SCH	1 of 1	C	03 Mar 21	X8K_SideKeys_Board
11-S130-650017-SCH	1 of 1	D	03 Mar 21	X8K_Antenna_Board
11-S130-650009-SCH	1 of 1	A	03 Mar 21	X8K_EX_BlockDiagram
11-S130-650009-BOM*	1 to 4	A	09 Apr 21	X8K_EX_Critical_Component_List

\* Drawing number not within document.

#### Issue 1

##### Documents Introduced or Revised

Drawing	Sheets	Rev.	Date (Stamp)	Title
11-S130-650007	1 of 1	01	27-Jul-22	X8K-SD07-Screen_Protector

Issue 2 – No new drawings were introduced.

#### Issue 3

##### Documents Introduced or Revised

Drawing	Sheets	Rev.	Date (Stamp)	Title
11-S130-650011-SCH	1 of 1	F	24 Jul 25	X8K_Battery_Board
11-S130-650009-BOM*	1 to 4	B	24 Jul 25	X8K_EX_Critical_Component_List
11-S130-650031	1 of 1	-	24 Jul 25	Battery Board Conformal Coating X8K