



1 EC TYPE-EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 14ATEX2287X Issue: 1

4 Equipment: Orbit X Camera

5 Applicant: **Bartec Technor AS**

6 Address: Dusavikveien 39

N-4007 Stavanger

Norway

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment 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 Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012

EN 60079-11:2012

EN 60079-28:2007

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:



II 2G Ex ib op is IIC T4 Gb Ta = -20°C to +45°C



Project Number 70056520

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C Ellaby Deputy Certification Manager

Sira Certification Service

Unit 6, Hawarden Industrial Park, Hawarden, CH5 3US, United Kingdom





SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 14ATEX2287X Issue 1

13 **DESCRIPTION OF EQUIPMENT**

The Orbit X is an intrinsically safe, video collaboration camera featuring HD video and audio communication, WiFi and Bluetooth connectivity, and an autofocus lens. It has a laser, LED flash and microphones as well as an external mini-jack and a micro-USB connection. The camera is used for wearable video recording and real-time two-way audio and video communication.

The OrbitX has the following intrinsically safe ports for user connection:

	USB	Headset
Uo	±8.4 V	±5.8 V
Io	0.889 A	0.796911 A
Po	0.933 W	1.156 W
Co	1.35 μF	1.39 µF
Lo	3.06 μH	20.6 μH
Non-hazardous area connection: Um	5.8 V	

Variation 1 - This variation introduced the following changes:

- i. Additional chargers were approved and listed in the user conditions;
- ii. An alternative housing for the laser was recognised;
- iii. The marking method is changed from a self-adhesive label to engraving.
- iv. A typographical error in the standards was corrected.

14 **DESCRIPTIVE DOCUMENTS**

14.1 **Drawings**

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	18 March 2015	R70013645A	The release of the prime certificate.
1	11 March 2016	R70056520A	The introduction of Variation 1.

15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

- 15.1. The ambient temperature range of the equipment is -20°C to +45°C.
- 15.2. The equipment shall be protected from contamination by liquid and dust; this is normally achieved by the operator carrying the device on their person.
- 15.3. The USB port may be used for charging the equipment when in the non-hazardous area only, using one of the following chargers specifically supplied for use with the unit:
 - Deltaco part number USB-AC35M (ambient for charging is 0°C to 45°C)
 - Ansmann part number 1001-0007 (ambient for charging is 0°C to 45°C)
 - GlobTek model number GT-41078-0505-USB (ambient for charging is 0°C to 45°C)
 - GlobTek model number GT-41078-0506-0.4-USB (ambient for charging is 0°C to 45°C)
 - Glob Tek model number GT*-46101-*05*-USB (ambient for charging is 0°C to 40°C)
 - Glob Tek model number GT*-46101-*06*-USB (ambient for charging is 0°C to 35°C)

The maximum input voltage (Um) from the charger between the lines is 5.8 V.

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SCHEDULE

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Sira 14ATEX2287X Issue 1

- 15.4. The USB port is also used for data download in the non-hazardous area only. The port has been assessed with a U_m of 5.8 V and shall be installed in accordance with clause 16.2.1 of EN 60079-14:2014.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 **CONDITIONS OF CERTIFICATION**
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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Certificate Annexe

Certificate Number: Sira 14ATEX2287X

Equipment: Orbit X Camera

Applicant: Bartec Technor AS



Issue 0

Drawing no.	Sheets	Rev	Date (Sira stamp)	Title
General Assembly Orbit X	1 of 1	04	25 Feb 15	General assembly
M7LG3_Label_OrbitX_ATEX_version	1 of 1	00	25 Feb 15	Marking
OrbitX_EX_Critical_Component_List	1 of 1	2	25 Feb 15	Critical component list
OrbitX_EX_Sector_Diagram	1 of 1	2	25 Feb 15	Sector diagram
PIX-ORBITX_ALL_ASSY_EXPLODED	1 of 1	02	25 Feb 15	General assembly, exploded
PX-HW-DV-XC-CT-2014-124	1 of 1	1	25 Feb 15	Block diagram
X7K_Minicam_Board_Layout	1 to 15	В	25 Feb 15	Main board layout
X7K_Minicam_Flex_Battery_Layout	1 to 4	Α	25 Feb 15	Flex battery board layout
X7K_Minicam_Flex_Layout	1 to 8	В	25 Feb 15	Flex board layout

Issue 1

Drawing no.	Sheets	Rev	Date (Sira stamp)	Title
M7LG3_Label_OrbitX_ATEX_version	1 of 1	02	15 Feb 16	Marking
OrbitX_EX_Critical_Component_List	1 to 3	3	02 Feb 16	Critical component list
OrbitX_EX_Sector_Diagram	1 of 1	3	02 Feb 16	Sector diagram

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