An-Institut der TU Bergakademie Freiberg

EU-TYPE EXAMINATION CERTIFICATE - Translation [1]

Equipment or protective systems [2] intended for use in potentially explosive atmospheres, Directive 2014/34/EU



EU-type examination certificate number IBExU15ATEX1084 | Issue 1 [3]

Product: [4]

Bluetooth handheld scanner Type: iSCAN2X1, iSCAN2X1PDF, iSCAN2X12D and Bluetooth Base station Type: iSCAN2X1ExBX

Manufacturer: [5]

Extronics Ltd

Address: [6]

1 Dalton Way, Midpoint 18, Middlewich, Cheshire, CW10 OHU

UNITED KINGDOM

- This product and any acceptable variation thereto is specified in the schedule to this certificate and the [7] documents therein referred to.
- IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 in accordance with Article 17 [8] of 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 test report IB-19-3-0188.

- Compliance with the essential health and safety requirements has been assured by compliance with: [9] EN IEC 60079-0:2018, EN 60079-11:2012 and EN 60079-28:2015 except in respect of those requirements listed at item [18] of the schedule.
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule to this certificate.
- This EU-type examination certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

Types iSCAN2X1, iSCAN2X1PDF, iSCAN2012D und iSCAN211ExB3

🖾 II 2G Ex ib IIB T4 Gb -20 °C ≤ T_{amb} ≤ +50 °C

Type iSCAN2112D:

(II 2G Ex ib op is IIB T4 Gb (a) II 2D Ex ib op is IIIC T135 °C Db -20 °C ≤ T_{amb} ≤ +50 °C

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Types iSCAN2X1EXB, iSCAN201EXB2D

☑ II 2G Ex ib IIC T4 Gb☑ II 2D Ex ib IIIC T135 °C Db

-20 °C ≤ T_{amb} ≤ +50 °C

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By order

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Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2019-12-12

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[13]

Schedule

[14]

Certificate number IBExU15ATEX1084 | Issue 1

Description of product [15]

The Bluetooth hand scanner is used as a hand-held unit in hazardous areas of which require equipment for category 2G and 2D. It is used to capture 1D codes (barcodes) and 2D codes (stackedcodes). The handheld scanner is supplied by an internal lithium-ion rechargeable battery.

The hand scanner consists of a housing made of plastic including window. The housing contains the electronic circuits and the light sources.

The data transfer is carried out via Bluetooth short-range radio to the Bluetooth base charging station standing in the non-hazardous area or to Bluetooth base station with charging function, which is located in the hazardous area.

The intrinsically safe Bluetooth base station contains the data interface and a charging circuit for the Bluetooth hand scanner. It can be supplied in a hazardous area with the supply unit iSCANPSX By means of the supply unit the non - intrinsically safe data signals (USB, RS232, RS422) are converted in intrinsically safe data signals.

The rechargeable battery may be charged outside the hazardous area with a separate base charging station and power supply or in hazardous areas with the Bluetooth base station in connection with an intrinsically safe power supply.

Type distinction:

Bluetooth handheld scanner:

iSCAN201 / iSCAN201PDF

Ex ib IIB T4 Gb, Ex ib IIIC T135 °C Db

iSCAN2012D

iSCAN211 / iSCAN211PDF

Bluetooth handheld scanner:

iSCAN2112D

Ex ib op is IIB T4 Gb, Ex ib op is IIIC T135 °C Db

Bluetooth Base Station with charging function:

iSCAN201EXB iSCAN201EXB2D

Ex ib IIC T4 Gb; Ex ib IIIC T135 °C

iSCAN211EXB

Bluetooth Base Station with charging function:

iSCAN211EXB3

Ex ib IIB T4 Gb; Ex ib IIIC T135°C Db

Technical Data

Ambient temperature range

-20 °C to +50 °C

Light Source; Target laser:

visible red light; wave length 630 nm; Popt. < 35 mW

Interface:

Bluetooth V2.1/4.0 EDR; Bluetooth class 2/1 2.402 - 2.4830 GHz; max. distance 30 m / 100 m

serial communication RS-232/422 /USB

Current consumption:

330 mA (standby 80/130 mA; peak 500 mA) Type iSCAN2X3BATT 3.6 V; 1500 mAh

permitted battery:

Type iSCAN2X1BATT 3.6 V; 2250 mAh

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Electrical data:

	Bluetooth Handscanner type iSCAN2112D	Bluetooth Hand Scanner type iSCAN201 / iSCAN201PDF	Bluetooth Hand Scanner type iSCAN211 / iSCAN211PDF	Bluetooth Hand Scanner type iSCAN2012D
maximum input volt- age U _i	4.2 V	4.2 V	4.2 V	4.2 V
maximum input cur- rent I _i	1071 mA	1071 mA	1071 mA	1071 mA
maximum input power P _i	4.5 W	4.5 W	4.5 W	4.5 W
maximum internal inductance L _i	negligible	negligible	negligible	negligible
maximum internal capacitance C _i	1180 μF	407 μF	401 μF	415 μF

Remark: Input voltage to the handheld scanner is the maximum voltage provided by the rechargeable battery.

	Bluetooth base station type SCAN201EXB	Bluetooth base station iSCAN211EXB3	
	Bluetooth base station type iSCAN201EXB2D		
	Bluetooth base station type iSCAN211EXB		
maximum input voltage U _i	4.9 V	5.5 V	
maximum input current Ii	480 mA	480 mA	
maximum input power Pi	1.25 W	1.25 W	
maximum internal inductance Li	negligible	negligible	
maximum internal capacitance Çi	112 µF	190.3 μF	
with connecting cable iSCAN2XXCA	B7 / iSCAN2XXCAB8	A AND	
maximum input voltage U _i	5.6 V	5.6 V	
maximum input current Ii	480 mA	480 mA	
maximum input power P _i	1.25 W	1.25 W	
maximum internal inductance Li	negligible	negligible	
maximum internal capacitance Çi	46 μF	46 µF	

Remark:

Input voltage to the Bluetooth base station itself is reduced on this type associated connecting cable iSCAN2XXCAB7 / iSCAN2XXCAB8 of 5.6 V to 4.9 V.

Accessories:

Separate charging box and Base charging station outside the hazardous area with power supply type iSCAN201BLP

Type: iSCAN201BNOBT, iSCAN201B, iSCAN201BNOBT2D, iSCAN201B2D

iSCAN211BNOBT2D, iSCAN211B, iSCAN211BnoBT3, iSCAN211B3 and base station iSCAN212EXB2D with intrinsically safe power supply (iSCANPSCABUX / iSCANPSCABRX)

for Bluetooth Scanner:

Type: iSCAN201, iSCAN201PDF, iSCAN2012D, iSCAN211, iSCAN211PDF, iSCAN2112D Rated current: 85 mA

Rated voltage: 5 V Um: 253 V AC

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Variations compared to EC-Type Examination Certificate:

Variation 1

The devices comply with the requirements of EN IEC 60079-0:2018.

Variation 2

A new type has been added.

[16] Test report

The test results are recorded in the confidential test report IB-19-3-0188 of 2019-12-06.

The test documents are part of the test report and they are listed there.

Summary of the test results

The Bluetooth handheld scanner and Base station mentioned under [4] further comply with the requirements of explosion protection for electrical equipment of Group II and category 2G and 2D in type of protection intrinsic safety in combination with Protection of equipment and transmission systems using optical radiation.

[17] Specific conditions of use

None

[18] Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

None

[19] Drawings and Documents

The documents are listed in the test report.

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Freiberg, 2019-12-12

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