



[1] **EU-TYPE EXAMINATION CERTIFICATE - Translation**

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

[3] EU-type examination certificate number **IBExU15ATEX1083** | Issue 1

[4] Product: **Wired handheld scanner**
Type: iSCAN101, iSCAN101PDF, iSCAN1012D, iSCAN1112D

[5] Manufacturer: Extronics Ltd

[6] Address: 1 Dalton Way, Midpoint 18, Middlewich, Cheshire, CW10 OHU
UNITED KINGDOM

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

[8] IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 in accordance with Article 17 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-19-3-0187.

[9] Compliance with the essential health and safety requirements has been assured by compliance with: 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.



[11] 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:

Type iSCAN101 and iSCAN101PDF:

 **II 2G Ex ib IIC T4 Gb**
 **II 2D Ex ib IIIC T135 °C Db**
-20 °C ≤ Ta ≤ +50 °C

Type iSCAN1012D:

 **II 2G Ex ib IIB T4 Gb**
 **II 2D Ex ib IIIC T135 °C Db**
-20 °C ≤ Ta ≤ +50 °C

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An-Institut der TU Bergakademie Freiberg

Type iSCAN1112D

 **II 2G Ex ib op is IIB T4 Gb**
 **II 2D Ex ib op is IIIC T135 °C Db**
-20 °C ≤ Ta ≤ +50 °C

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By order



Dipl.-Ing. [FH] Henker



(notified body number 0637)

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, 2019-12-06

[13] **Schedule**

[14] **Certificate number IBExU15ATEX1083 | Issue 1**

[15] **Description of product**

The wired handheld scanners type iSCAN101, iSCAN101PDF, iSCAN1012D und iSCAN1112D are 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 (stacked-codes).

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

The hand scanner is connected by means of supply cable iSCAN1XXCABX with an intrinsically safe power supply iSCANPSX or iSCANPSX2D.

Technical Data

- Ambient temperature range: -20 °C to +50 °C
- Light Source; Target laser: visible red light, wave length 630 nm;
P_{opt.} < 35 mW or 5 mW/mm²; wave length 630 nm
- Current consumption: ≤ 420 mA (standby 220 mA; scan 420 mA)

Electrical data:

	iSCAN101 and iSCAN101PDF	iSCAN101 and iSCAN101PDF	iSCAN101 and iSCAN101PDF	iSCAN101 2D	iSCAN1012D	iSCAN1112D	iSCAN1112D
connecting cable	iSCAN1XXCAB5 iSCAN1XXCAB6	iSCAN1XXCAB1 iSCAN1XXCAB2	iSCAN1XXCAB3 iSCAN1XXCAB4	iSCAN1XXCAB1 iSCAN1XXCAB2	iSCAN1XXCAB3 iSCAN1XXCAB4	iSCAN1XXCAB1 iSCAN1XXCAB2	iSCAN1XXCAB3 iSCAN1XXCAB4
maximum input voltage U _i	5.6 V	4.9 V	4.9 V	4.9 V	4.9 V	5.6 V	5.6 V
maximum input current I _i	480 mA	480 mA	480 mA	750 mA	780 mA	1140 mA	1180 mA
maximum input power P _i	1.25 W	1.25 W	1.25 W	2 W	2 W	4.5 W	4.5 W
maximum internal inductance L _i	negligible	negligible	negligible	negligible	negligible	negligible	negligible
maximum internal capacitance C _i	46 µF	112.4 µF	112.4 µF	202 µF	202 µF	869 µF	869 µF

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-19-3-087 of 2019-11-26. The test documents are part of the test report and they are listed there.

Summary of the test results

The hand scanner 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, 2019-12-06