IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx IBE 15.0024**

Certificate history:
Issue 0 (2015-10-16)

Status: **Current**

Issue No: 1

Date of Issue: 2019-12-12

Applicant: **Extronics Limited**
1 Dalton Way
Midpoint 18
Middlewich Cheshire
CW10 OHU
United Kingdom

Equipment: **Bluetooth handheld scanner Type: iSCAN2X1, iSCAN2X1PDF, iSCAN2X12D and bluetooth base station Type: iSCAN2X1ExBX**

Optional accessory:

Type of Protection: **Intrinsic Safety "i"**

Marking: Types iSCAN2X1, iSCAN2X1PDF, iSCAN2012D und iSCAN211ExB3
Ex ib IIB T4 Gb
Ex ib IIIC T135 °C Db
-20 °C ≤ T_{amb} ≤ +50 °C

Type iSCAN2112D:
Ex ib op is IIB T4 Gb
Ex ib op is IIIC T135 °C Db
-20 °C ≤ T_{amb} ≤ +50 °C

Types iSCAN2X1EXB, iSCAN201EXB2D
Ex ib IIC T4 Gb
Ex ib IIIC T135 °C Db
-20 °C ≤ T_{amb} ≤ +50 °C

Approved for issue on behalf of the IECEx Certification Body: **Alexander Henker**

Position: **Deputy Head of department Certification Body**

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7
09599 Freiberg
Germany

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Certificate No.: **IECEx IBE 15.0024**

Date of issue: 2019-12-12 Issue No: 1

Manufacturer: **Extronics Limited**
1 Dalton Way
Midpoint 18
Middlewich Cheshire
CW10 OHU
United Kingdom

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

DE/IBE/ExTR15.0015/00 DE/IBE/ExTR15.0015/01

Quality Assessment Report:

GB/EXV/QAR19.0010/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Bluetooth hand scanner is used as a hand-held unit in hazardous areas requiring equipment for EPL Gb and Db. It is used to capture 1D codes (barcodes) and 2D codes (stacked-codes). 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: Ex ib IIB T4 Gb, Ex ib IIIC T135 °C Db	iSCAN201 / iSCAN201PDF iSCAN2012D iSCAN211 / iSCAN211PDF
Bluetooth handheld scanner: Ex ib op is IIB T4 Gb, Ex ib op is IIIC T135 °C Db	iSCAN2112D
Bluetooth Base Station with charging function: Ex ib IIC T4 Gb; Ex ib IIIC T135 °C	iSCAN201EXB iSCAN201EXB2D iSCAN211EXB
Bluetooth Base Station with charging function: Ex ib IIB T4 Gb; Ex ib IIIC T135 °C	iSCAN211EXB3

The technical data are mentioned in the Annex to this certificate.

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- The devices comply with the requirements of IEC 60079-0, Ed. 7.
- A new type has been added.
- A new QAR has been provided.

Annex:

Annex_IBE15.0024_01.pdf

IECEx Certificate of Conformity - Annex

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Technical Data

- Ambient temperature range: -20 °C to +50 °C
- Light Source; Target laser: visible red light, Popt. < 35 mW; wave length 630 nm
- 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)
- permitted battery: Type iSCAN2X3BATT 3.6 V; 1500 mAh
  Type iSCAN2X1BATT 3.6 V; 2250 mAh

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 voltage Ui	4.2 V	4.2 V	4.2 V	4.2 V
maximum input current Ii	1071 mA	1071 mA	1071 mA	1071 mA
maximum input power Pi	4.5 W	4.5 W	4.5 W	4.5 W
maximum internal inductance Li	negligible	negligible	negligible	negligible
maximum internal capacitance Ci	1180 µF	407 µF	401 µF	415 µF

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

IECEx Certificate of Conformity - Annex

	Bluetooth base station type *SCAN201EXB* Bluetooth base station type *iSCAN201EXB2D* Bluetooth base station type *iSCAN211EXB*	Bluetooth base station *iSCAN211EXB3*
maximum input voltage Ui	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 Ci	112 µF	190.3 µF
with connecting cable iSCAN2XXCAB7 / iSCAN2XXCAB8		
maximum input voltage Ui	5.6 V	5.6 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 Ci	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
$U_{m:}$ 253 V AC Rated voltage: 5 V Rated current: 85 mA