

[1] **EC-TYPE EXAMINATION CERTIFICATE**

according to Directive 94/9/EC, Annex III

(Translation)



[2] Equipment and Protective Systems intended for use in Potentially Explosive Atmospheres, **Directive 94/9/EC**

[3] EC-Type Examination Certificate Number: **IBExU15ATEX1084**

[4] Equipment: a) **Bluetooth handheld scanner type iSCAN 2*1***
b) **Bluetooth base station type iSCAN 2*1EXB***

[5] Manufacturer: **Extronics Limited**

[6] Address: **1 Dalton Way, Midpoint 18, Middlewich, Cheshire, CW10 0HU
UNITED KINGDOM**

[7] The design of the equipment mentioned under [4] and any acceptable variation thereto is specified in the schedule to this EC-Type Examination Certificate.

[8] IBExU Institut für Sicherheitstechnik GmbH, NOTIFIED BODY number 0637 in accordance with article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that the equipment mentioned in [4] has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The test results are recorded in the test report IB-15-3-084 of 2nd November 2015.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012+A11:2013 and EN 60079-11:2012.

[10] 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 [17] in the schedule to this EC-Type Examination 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 BT handheld scanner mentioned in [4] a) shall include the following:

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

The marking of the BT base station mentioned in [4] b) shall include the following:

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

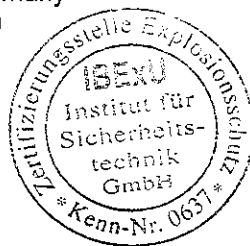
IBExU Institut für Sicherheitstechnik GmbH
Fuchsmühlenweg 7 - 09599 Freiberg, Germany
☎ +49 (0) 3731 3805-0 - 📠 +49 (0) 3731 23650

Authorised for certifications
- Explosion protection -

By order

(Dipl.-Ing. [FH] Henker)

Annex



- Seal -
(ID no. 0637)

Freiberg, 2nd November 2015

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.

[13] **Annex**

[14] **to the EC-TYPE EXAMINATION CERTIFICATE IBExU15ATEX1084**

[15] **Description of the equipment**

The Bluetooth hand scanner is used to detect 1D barcodes and 2D stacked codes in hazardous areas of category 2G and 2D. The handheld scanner is powered by an integrated lithium-ion rechargeable battery.

The data transfer is carried out via Bluetooth short-range radio either to the Bluetooth base charging station standing in the non-hazardous area or to the approved Bluetooth base station iSCAN 2*1EXB* with charging function standing in the hazardous area or other stationary receiver with Bluetooth interface (e.g. notebook or PC) in hazardous or non-hazardous areas.

The rechargeable battery may be charged outside the hazardous area with a separate base charging station or in hazardous areas with the Bluetooth base station iSCAN 2*1EXB* in connection with an intrinsically safe power supply (e.g. iSCANPS*).

The power supply unit also absorbs the conversion of non-intrinsically safe data signals (USB, RS232, RS422) in intrinsically safe data signals.

Types:

Bluetooth hand scanner

Ex ib IIB T4, Ex ib IIIC T135°C	iSCAN 201, iSCAN201PDF iSCAN 211, iSCAN211PDF iSCAN 201 2D
---------------------------------	--

Bluetooth base station

Ex ib IIC T4, Ex ib IIIC T135°C	iSCAN 201EXB, iSCAN211EXB iSCAN 201EXB 2D
---------------------------------	--

Ambient temperature range: -20 °C to +50 °C

Electrical data

BT handheld scanner iSCAN 2*1*

Light source: visible red light:	630 nm; $P_{opt.} < 35 \text{ mW}$
Data interfaces:	Bluetooth: V2.1/V4.0 DER Class 2 (100 mW) 2.4 ... 2.4835 MHz (ISM-band)
Current consumption:	330 mA (standby 80/130 mA; peak 500 mA)
Battery iSCAN201BATT:	3.6 V; 2250 mAh

BT base station iSCAN 2*1EXB*

maximum input voltage	U_i	4.9 V DC
maximum input current	I_i	480 mA
maximum input power	P_i	1.25 W
maximum inner inductance	L_i	negligible
maximum inner capacitance	C_i	112 μF

with connection cable iSCAN CAB7, iSCAN CAB8

maximum input voltage	U_i	5.6 V DC
maximum input current	I_i	480 mA
maximum input power	P_i	1.25 W
maximum inner inductance	L_i	negligible
maximum inner capacitance	C_i	46 μF

Accessories:

Separate charging boxes with power supply iSCAN201BLP:

iSCAN201BNOBT, iSCAN201B for Scanner iSCAN201
iSCAN201BNOBT, iSCAN211B for Scanner iSCAN201 PDF
iSCAN201BNOBT, iSCAN201B 2D for Scanner iSCAN201 2D

U_m: 253 VAC, Rated voltage 5 V, Rated current 85 mA

[16] **Test report**

The proof of the explosion protection is explained in detail in the test report IB-15-3-084.
The test documents are part of the test report and are listed there.

Summary of the test results:

The BT handheld scanner type iSCAN 2*1* und die BT base station type iSCAN 2*1EXB fulfil the requirements of explosion protection for the Equipment Group II and Category 2G for explosive gas atmospheres IIB or IIC and temperature class T4 or for category 2D for dust explosions hazardous areas.

[17] **Special conditions for safe use**

none

[18] **Essential Health and Safety Requirements**

Confirmed by compliance with standards (see [9]).

By order

Freiberg, 2nd November 2015



(Dipl.-Ing. [FH] Henker)