



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx PTB 13.0006 Issue No: 1 Certificate history:  
Status: **Current** Page 1 of 4 [Issue No. 1 \(2014-07-17\)](#)  
Date of Issue: **2014-07-17** [Issue No. 0 \(2013-03-08\)](#)  
Applicant: **ecom Instruments GmbH**  
Industriestraße 2, 97959 Assamstadt, Germany  
**Germany**  
Electrical Apparatus: **Explosion protected PDA type i.roc Ci70 - Ex**  
*Optional accessory:*  
Type of Protection: **General Requirements, Intrinsic Safety**  
Marking:  
Ex ia IIC T4 Gb IP64  
Ex ia IIIC T135°C Db IP6X

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

Dr.-Ing. Ulrich Johannsmeyer

*Position:*

Head of Department "Explosion Protection in Sensor Technology and  
Instrumentation"

*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 the [Official IECEx Website](#).

Certificate issued by:

**Physikalisch-Technische Bundesanstalt (PTB)**  
Bundesallee 100  
38116 Braunschweig  
Germany





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Certificate No: IECEx PTB 13.0006 Issue No: 1

Date of Issue: 2014-07-17 Page 2 of 4

Manufacturer: **ecom Instruments GmbH**  
Industriestraße 2, 97959 Assamstadt, Germany  
**Germany**

Additional Manufacturing  
location(s):

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 electrical apparatus 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 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

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

*This Certificate **does not** indicate compliance with electrical 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 Report:

[DE/PTB/ExTR13.0009/01](#)

Quality Assessment Report:

[DE/PTB/QAR07.0004/02](#)



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Certificate No: IECEx PTB 13.0006

Issue No: 1

Date of Issue: 2014-07-17

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The explosion protected PDA type i.roc Ci70 -Ex is a hand-held communication device intended for use in hazardous areas of Zones 1 and 21. It is used for mobile acquisition, processing and wireless transmission of data inside hazardous areas. The PDA type i.roc Ci70-Ex may be operated optionally with listed accessories like leather case, holster and scan handle. The PDA type i.roc Ci 70 -Ex may be operated optionally with SD-memory cards and/or SIM card.

For further information see annex.

**CONDITIONS OF CERTIFICATION: NO**



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Certificate No: IECEx PTB 13.0006

Issue No: 1

Date of Issue: 2014-07-17

Page 4 of 4

## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Minor internal changes of the electronics.  
new: RFID-UHF reader NE-UNI900-A\* and NU-UNI900-A\*  
head module 2D multi range barcode imager EN-EX25-A\*

### Annex:

[CoCA-PTB 13-0006-01.pdf](#)



Manufacturer: ecom instruments GmbH  
Equipment: PDA i.roc Ci70 –Ex

### General product information:

The explosion protected PDA i.roc Ci70 -Ex is a hand-held communication device intended for use in hazardous areas of Zones 1 and 21. It is used for mobile acquisition, processing and wireless transmission of data inside hazardous area. The PDA may be operated optional with listed accessories like leather case, holster and scan handle. The PDA i.roc Ci70 – Ex may be operated optionally with SD-memory cards and/or SIM card.

Permissible ambient temperature range: -20°C to 50°C.

### Electrical data:

Supply: only for use with Battery pack Type AM Ci70 -Ex  
The battery pack is intended to be changed by the user only outside the hazardous area.  
The Battery pack Type AM Ci70 –Ex shall be charged only outside the hazardous area.  
Charging and data connection is only allowed to be used with the specially designed and listed charging unit for i.roc Ci70 -Ex outside the explosion hazardous area.

### Installation Notes:

- Do not open the device inside the explosion hazardous area.
- Use only the original battery module "AM Ci70 -Ex".
- The battery module shall only be charged outside the explosion hazardous area and only by using the specified charging devices (see Safety Instructions).
- The data connection is only allowed to be used outside the explosion hazardous area by using the ecom Desktop Dock (Intermec art. 852-920-001/002) or ecom Single Dock (ecom art. AS0030301).
- When changing the battery (outside explosion hazardous areas), ensure that both, the device and the battery module are clean of dust and dirt.

### Permitted Accessories:

- Leather Case – ecom art. A0030303
- Holster – ecom art. A0030304
- Scan Handle – ecom art. A0030302

### Optional reader electronics are:

RFID reader:  
NL-TLB30-A\* and NL-TLB30-B\* 125/134KHz LF RFID R/W Module Air Coil  
NF-TLB30-A\* and NF-TLB30-B\* 125/134KHz LF RFID R/W Module Ferrite  
NH-UNI13-A\* and NH-UNI13-B\* 13.56MHz HF RFID R/W Module  
NQ-ARE8-A\* and NQ-ARE8-B\* TROVAN LF RFID R/W Module  
NT-LID-A\* and NT-LID-B\* TROVAN LF RFID R/W Module  
Further possible RFID reader modules are listed in the safety instructions.

RFID UHF reader:  
NE-UNI900-A\* 868MHz UHF RFID R/W Module  
NU-UNI900-A\* 915MHz UHF RFID R/W Module



RFID Kombi Reader:

SL-SE955-TLB30-A\*

SF-SE955-TLB30-A\*

SH-SE955-UNI13-A\*

ST-SE955-LID-A\*

Kombi Module 1D Barcode + LF RFID

Kombi Module 1D Barcode + LF RFID

Kombi Module 1D Barcode + LF RFID

Kombi Module 1D Barcode + Trovan

Barcode reader:

SN-SE955-A\* and SN-SE955-B\* 1D Laser Barcode Scanner

2D Multi Range Barcode Imager:

EN-EX25-A\*

2D Barcode Imager

WWAN module:

Type: Gobi 3000

RF Power:

WLAN/Bluetooth:

radiated transmission power max. 100 mW

HF-output power:

radiated transmission power max. 2 W

RFID reader:

radiated transmission power max. 2 W