



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

Certificate No.:	IECEx PTB 13.0006	Issue No: 1	Certificate history: Issue No. 1 (2014-07-17) Issue No. 0 (2013-03-08)
Status:	Current	Page 1 of 4	
Date of Issue:	2014-07-17		
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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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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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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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