



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 12 ATEX 2030



(4) Equipment: Explosion protected PDA type i.roc Ci70 -Ex

(5) Manufacturer: ecom instruments GmbH

(6) Address: Industriestraße 2, 97959 Assamstadt, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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 PTB Ex 13-22201.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2012, 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 the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:



II 2 G Ex ia IIC T4 Gb IP64



II 2 D Ex ia IIIC T135 °C Db IP6x

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, March 27, 2013

Dr.-Ing. U. Johannsmeyer
Direktor und Professor



(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2030

(15) Description of equipment

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

Electrical data:

Supply: only for use with battery pack type AM Ci70 -Ex

The battery pack is intended to be changeable by the user only outside the explosion hazardous area.

The battery pack type AM Ci70 -Ex shall be charged only outside the explosion hazardous area.

The charging and data connection is only allowed outside the explosion hazardous area by using the special for i.roc Ci70 -Ex designed and listed charging units.

Installation Notes:

- Do not open the device inside the explosion hazardous area
- Use only the original battery module "AM Ci70 -Ex"
- The battery module may only be charged outside the explosion hazardous area. See Safety Instructions.
- The data connection is only allowed outside the explosion hazardous area and only allowed by using the ecom Desktop Dock (Intermec art. 852-920-001) or ecom Single Dock (ecom art. AS0030301).
- When changing the battery (outside explosion hazardous areas), ensure that both the i.roc Ci70 -Ex 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

sheet 2/3

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2030

Optional reader electronics:

RFID reader:

NL-TLB30-A*	125/134KHz LF RFID R/W Module Air Coil
NF-TLB30-A*	125/134KHz LF RFID R/W Module Ferrite
NH-UNI13-A*	13.56MHz HF RFID R/W Module
NQ-ARE8-A*	TROVAN LF RFID R/W Module
NT-LID-A*	TROVAN LF RFID R/W Module

Further possible RFID reader modules are listed in the safety instructions.

Barcode reader:

SN-SE955-A*	1D Laser Barcode Scanner
-------------	--------------------------

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

(16) Test report PTB Ex 13-22201

(17) Special conditions for safe use
none

(18) Essential health and safety requirements
met by compliance with the standards mentioned above

Zertifizierungssektor Explosionsschutz
On behalf of PTB:


Dr.-Ing. U. Johannsmeyer
Direktor und Professor



Braunschweig, March 27, 2013

sheet 3/3

1. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 12 ATEX 2030

(Translation)

Equipment: Explosion protected PDA type i.roc Ci70-Ex

Marking:  II 2 G Ex ia IIC T4 Gb IP64 or II 2 D Ex ia IIIC T135 °C Db IP6x

Manufacturer: ecom instruments GmbH

Address: Industriestraße 2, Assamstadt, Germany

Description of supplements and modifications

The explosion protected PDA type i.roc Ci70-Ex is a hand-held communication device intended for use in explosion 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 optionally with listed accessories like leather case, holster and scan handle. The PDA type i.roc Ci70-Ex may be operated optionally with SD-memory card and/or SIM card. It may be also manufactured and used according to the test documents mentioned in section 3 of the test report.

The modifications are as follows:

- Minor changes of the internal construction,
- the "Electrical Data",
- new: RFID-UHF Reader NE-UNI900-A* and NU-UNI900-A*,
- new: Head module 2D Multi Range Barcode Imager EN-EX25-A*

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 explosion hazardous area.

The Battery pack type AM Ci70 -Ex shall be charged only outside the explosion hazardous area.

1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB12 ATEX 2030

Charging and data connection is only allowed outside the explosion hazardous area using the charging unit specially designed and listed for i.roc Ci70-Ex.

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 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*	Kombi Module 1D Barcode + LF RFID
SF-SE955-TLB30-A*	Kombi Module 1D Barcode + LF RFID
SH-SE955-UNI13-A*	Kombi Module 1D Barcode + LF RFID
ST-SE955-LID-A*	Kombi Module 1D Barcode + Trovan

Barcode reader:

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

1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB12 ATEX 2030

2D Multi Range Barcode Imager:
EN-EX25-A*

2D Barcode Imager

WWAN module:
Type: Gobi 3000

RF Power:
WLAN/Bluetooth:
HF-output power:
RFID reader:

radiated transmission power max. 100 mW
radiated transmission power max. 2 W
radiated transmission power max. 2 W

Applied standards

EN 60079-0:2012, EN 60079-11:2012

Test report: PTB Ex 14-24069

Konformitätsbewertungsstelle Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, July 28, 2014

Dr.-Ing. U. Johannsmeyer
Direktor und Professor

