

# TEST CERTIFICATE

**No. DK0199-Alibi-07.02**

**Object name** CSC3

**Object type** Alibi Storage Device

**Issued by** DELTA Danish Electronics, Light & Acoustics  
EU - Notified Body No. 0199

**In accordance with** Paragraph 8.1 of the European Standard on metrological aspects of non-automatic weighing instruments EN 45501:1992, WELMEC Guide 2.3 (2005), WELMEC Guide 2.5 (2000), and WELMEC Guide 7.2 (2007)

**Issued to** Post Danmark A/S  
Teknisk afdeling Københavns Pakkecenter (BRC)  
Prior Parken 385  
2605 Brøndby  
Denmark

**Manufacturer** FKI Logistex A/S

**Characteristics** An external Alibi Storage Device suitable for use with both non-automatic weighing instruments and automatic weighing instruments.

**Description and documentation** The alibi storage device is described and documented in the annex to this certificate.

**Remarks** Summary of tests involved: see annex  
This test certificate cannot be quoted in an EU type approval certificate without permission of the holder of the certificate mentioned above.

**The annex comprises 4 pages.**

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## 1. General

The Data Storage device is designated CSC3 and used as an external alibi system for automatic weighing instruments and non-automatic weighing instruments at the parcel centre of Post Danmark in Brøndby. CSC3 also receive measuring results from multi-dimensional measuring instruments, but at present this is not regarded as legal information.

## 2. Description

The CSC3 software realises in long term data storage for weight and dimensions of parcels.

CSC3 receives measuring results packed in records with CRC checksum from the connected measuring instruments. CSC3 collect weight, dimensions and parcel ID barcode for the parcel as it is transported through the parcel sorter controlled by the CSC3. The collected parcel information is stored in an alibi record protected with CRC checksum.

The 16-bit CRC checksum is calculated using a private secret key.

Parcels may be placed on a tray, while transported through the sorter. The tray has a barcode, which is used to identify the tray. The tray barcode can either be manually scanned or read by the overhead scanner. CSC3 has a preset tare function subtracting the weight of the tray from the gross weight of the parcel.

The 16-bit CRC checksum is calculated using a private secret key.

The CSC3 has an "Alibi lookup" facility. Entering the ID barcode will search the entire data base for occurrences of the barcode and display the found record(s) together with indication of whether CRC check is ok or not.

Stored records are transferred to a host computer for invoicing of the parcel service. This transmission is not under legal control.

CSC3 has a system test function, where a series of test parcels with known weight and parcel ID barcode is sent through the parcel sorter to ensure that all legal information is collected correct, as collected information is compared with the parcel information a priori stored in CSC3. The result of the test shall be printed and kept in a log book. The test shall be performed at least every 6 months and after service on the PC hosting CSC3 or the transmission network.

## 3. Technical data

CSC3 runs on a PC with SCO Unix and ISAM version 3 SQL server.

Alibi records are kept on the hard disk of the system for up to 1 month. Each month the alibi records are transferred to a removable back-up media (tape or CD).

#### **4. Weighing instruments to be connected**

CSC3 is intended for use with automatic catchweighers and multi-dimensional measuring instruments placed in the inlet to and on the parcel sorter or placed in special manual sorting lines. Furthermore non-automatic weighing instruments (NAWIs) can be connected for parcels, which are handled manually.

#### **5. Functions and facilities**

- Receiving secured alibi records for connected weighing instruments
- Secure storing of alibi records in database on disk
- Back-up of stored alibi records to removable media.
- Restoring of alibi records from back-up media.
- Alibi lookup of stored records based on ID barcode number.

#### **6. Interfaces and peripheral devices**

The interfaces of the PC used by CSC3 are declared protective by the manufacturer.

#### **7. Impositions and conditions**

The CSC3 meets the requirements only when it is correctly loaded, displaying its identification (see Section 8).

When using trays for preset tare their bended edge shall be (painted) in a light colour, and preventive maintenance shall be performed every 6 months on the vision system of the overhead scanner that detects tray barcodes for preset tare.

Enough copies of the tray barcode shall be placed on the tray to ensure reliable detection of it from all cameras of the overhead scanner.

New types of trays may only be put into use after this has been agreed upon by the issuing authority of this certificate.

Only but then CSC3 may be used for purposes subject to legal control.

## 8. Inscriptions and sealing

The size and checksum of the program modules responsible for handling legal data shall be the following, when displayed or printed by the CSC3.

```
=====
s2000 software version                               mm/dd/yy tt:mm:ss
Checksums oversigt for de kritiske dele af CSC'en
=====
Størrelse      Checksum      Navn
168188         626714115     mcisisrv
117716         469683476     ucart
28472          1077996400    stat
26652          2351142336    wsave
51720          926398010     host
405864         86032415      mmietherm
44148          766537898     testsrv
34700          3749900121    searcgsrv
137720         1481866873    xconv
31612          3990362984    ../../usr/lib/libcrc.so
=====
```

No sealing of CSC3 software is to be performed, as CSC3 contains no type parameters (TP) and device parameters (DP).

## 9. Additional information for the EC verification

A copy of this test certificate has to be supplied at verification of a connected measuring instrument.

## 10. Documentation

The submitted documentation is filed at DELTA in file no. E830071, E830081, E830082, and A530377.

## 11. Examinations performed

The following examinations were accomplished at a PC:

- Examination of the submitted documentation.
- Examination of the software in accordance with WELMEC Guide 2.3 (2005), WELMEC Guide 2.5 (2000), WELMEC Guide 7.2 (2007), and Directive 2004/22/EC, Annex I, section 8.1 - 8.4 and 10.3.
- Examination of functional and operational behaviour.

In accordance to WELMEC Guide 2.5 (2000), section 5.1 and 3.3 no additionally tests of the PC are necessary as it carries a CE mark.

The examination is reported in the following test reports:

- DANAK-199858, dated 30 July 2007, 40 pages.
- DANAK-199816, dated 26 September 2006, 91 pages
- DANAK-199760, dated 06 April 2005, 24 pages + 7 annexes
- DANAK-199732, dated 02 July 2004, 23 pages + 7 annexes