

# **EVALUATION CERTIFICATE**

## No. DK0199-16.06 Revision 1

| Object name                   | AlibiCert3Base  |                                   |
|-------------------------------|---|-----------------------------------|
| Object type                   | Data Storage Device   |                                   |
| Issued by                     | <b>DELTA Danish Electronics, Light &amp; Acoustics</b><br>EU - Notified Body No. 0199   |                                   |
| In accordance with            | The applicable requirements of the Measurement Instruments Di-<br>rective 2014/32/EU, and WELMEC Guide 7.2:2015   |                                   |
| Issued to                     | <b>BEUMER Group A/S</b><br>P. O. Pedersens Vej 10<br>8200 Aarhus N<br>Denmark   |                                   |
| Manufacturer                  | BEUMER Group A/S  |                                   |
| Characteristics               | An external Data Storage Device suitable for use as Alibi memory<br>device with both weighing instruments and multi-dimensional<br>measuring instruments. |                                   |
| Description and documentation | The data storage device is described and documented in the annex to this certificate.   |                                   |
| Remarks                       | nation certificate without permission of the holder of the certifi-<br>cate mentioned above.  | DE<br>Ve<br>29 <sup>.</sup><br>De |

The annex comprises 4 pages.

Issued on 2017-02-27

Signatory: J. Hovgård

DELTA

Venlighedsvej 4 2970 Hørsholm Denmark

Tel. (+45) 72 19 40 00 Fax (+45) 72 19 40 01 www.delta.dk VAT No. DK55117314



#### 1. General

The Data Storage device is designated AlibiCert3Base and used as an external alibi system for automatic weighing instruments and multi-dimensional measuring instruments. It handles the collection and long term storage of the legal measuring data for the parcels from the connected automatic catchweighers and multi-dimensional measuring instruments of the parcel sorter system.

### 2. Description

The AlibiCert3Base software realises in long term data storage for weight and dimensions of parcels.

AlibiCert3Base receives measuring results packed in records with CRC checksum (CRC1) from the connected measuring instruments. AlibiCert3Base collects weight, dimensions and parcel ID barcode for the parcel, as it is transported through the parcel sorter. The collected parcel information is stored in an alibi record protected with CRC checksum (CRC2).

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

The AlibiCert3Base 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.

AlibiCert3Base has a system test function, where a series of test parcels with known weight, dimensions, and parcel ID barcode are 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 AlibiCert3Base. 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 AlibiCert3Base, on the transmission network, or when connecting new legal measuring instruments. The purpose of the system test is to ensure correct transmission and storage of the legal measuring data, not to test the accuracy of the measuring instruments.

At start-up of the AlibiCert3Base program, the checksums – calculated using a HMAC-SHA256 algorithm - of the files with the executable code of AlibiCert3Base are compared against the checksums of the approved software, which are stored in an encrypted and checksum protected file, and in case of mismatch the AlibiCert3Base program cannot start.

An identification of the software can also be presented upon request via the Version GUI.



#### 3. Technical data

The Server part of AlibiCert3Base runs either on a separate PC or on the main PC controlling the parcel sorter. Likewise, the client can run on both separate PCs and on the client PCs of the sorter system.

The CSC5 software controlling the parcel sorter runs on the main PC, as well as on client PCs allowing additional operators to use the system.

Alibi records are kept on the hard disk of the system for up to 1 month. At the end of the period the system transfers all alibi records to one or more external disk systems used for backup. If not transferred, the parcel sorting stops when the database is full.

The backed-up data on an external disk system can be read back into the separate backup data storage area for looking up old alibi records.

#### 4. Measuring instruments to be connected

AlibiCert3Base is intended for use with automatic catchweighers and multi-dimensional measuring instruments placed at the inductions and on the parcel sorter.

The system can also support non-automatic weighing instruments.

#### 5. Functions and facilities

- Receiving secured alibi records for connected measuring instruments.
- Secure storing of alibi records in database on disk.
- Backup of stored alibi records to external disk system.
- Restoring of alibi records from back-up media.
- Alibi lookup of stored records in primary database or backup database, both based on ID barcode number of parcel.

#### 6. Interfaces and peripheral devices

The interfaces of the legally relevant software part of AlibiCert3Base are declared protective by the manufacturer.



#### 7. Impositions and conditions

The AlibiCert3Base meets the requirements only when it is correctly loaded, and its identifications - checksums of legally relevant modules - displayed are in accordance to the table in Section 8.

A tare function of the catchweighers is not to be used when connected to AlibiCert3Base.

Only then AlibiCert3Base may be used for purposes subject to legal control.

#### 8. Inscriptions and sealing

The version and the checksums of the legally relevant program modules shall be the following, when displayed or printed by the AlibiCert3Base.

Software version of alibi system: 1.0.0 or 1.1.0

| Source | File name                   | Checksum   |
|--------|-----------------------------|--|
| Server | \bin\alibicert3base-tst.jar | F0B554693F0085726C3D1ACA00FBA1F766FC059B7A587E8C9B60699A4B5781DB |
| Server | \bin\alibicert3base.dll     | 644E9CD871ACE4AD69AB4E87A30A29BE1E332499C765CA299B3DB380C65338A3 |
| Server | \bin\alibicert3base.jar     | 58DC9A3FE9F01C6C2214511BDC888895E25194792A428E299E45E4EA8E6CED92 |
| Server | \bin\alibicert3base.XML     | 7928871C06ED9FDB534B004B5055D6E80DFA0C3EF84DB29AA9A9306B267A9E31 |
| Server | \devenv.cfg                 | 8E8DE26D8F19291AA42D5D1A9B14CCCB64952B5548F7BB37EC95CC9F645A65C7 |
| Server | \doc\relnotes.txt           | 8C0D1041A8F300813CE4020CBEC71119462EB760A602E8780B90AD85960BF2BD |
| Server | \etc\MANIFEST.MF            | 6FFE299CD5636716344EBD481981D0E0F9848397EFA349110AEC931B8F86567E |
| Client | \bin\alibicert3base.dll     | 644E9CD871ACE4AD69AB4E87A30A29BE1E332499C765CA299B3DB380C65338A3 |

Checksums for software version 1.0.0

Checksums for software version 1.1.0

| Source | File name                   | Checksum   |
|--------|-----------------------------|--|
| Server | \bin\alibicert3base-tst.jar | 5FC41A05C96E89652C950D4ED09FED4F09E0C16DD28BEC6814D127DFF328F75C |
| Server | \bin\alibicert3base.dll     | 00C6D66E0B7F82050FB08F81F433F1A96496AEE7108752532009D7E27BB15391 |
| Server | \bin\alibicert3base.jar     | CEEB0192CD86A17A6715CD732977A62A34B2B3A2B0018B43BCE992ADF18D46C1 |
| Server | \bin\alibicert3base.XML     | C0EFBE605D68379A3F4A3C764F1E4DBCC0864309182AC8E6E26A0C4AF882C7E7 |
| Server | \devenv.cfg                 | 8E8DE26D8F19291AA42D5D1A9B14CCCB64952B5548F7BB37EC95CC9F645A65C7 |
| Server | \doc\relnotes.txt           | 93B258B2CD1BD93B5F7F33B33FC7E764A79A2F8403D9BE145248D85A1A2BE21B |
| Server | \etc\MANIFEST.MF            | 7BCA70EB609D4EA08A3996BED4BF38623192CAC8AC79EC2C5725E1149CC46608 |
| Client | \bin\alibicert3base.dll     | 00C6D66E0B7F82050FB08F81F433F1A96496AEE7108752532009D7E27BB15391 |

No sealing of AlibiCert3Base software is to be performed, as AlibiCert3Base contains no type parameters (TP) or device parameters (DP), and other legally relevant data are stored in encrypted files.



#### 9. Additional information for the EC verification

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

#### 10. Documentation

The submitted documentation is filed at DELTA in file no. T211247.

#### 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 7.2 (2015), and Directive 2014/32/EU, 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-1916803, dated 25 August 2015.

