# OIML Certificate

**OIML Member State**
The Netherlands

Number R129/2000-A-NL1-24.04 revision 1
Project number 3927200


| | |
|---|---|
| Issuing authority | NMi Certin B.V.<br>Person responsible: M.Ph.D. Schmidt |
| Applicant and Manufacturer | Rice Lake Weighing Systems<br>230 West Coleman St.<br>Rice Lake, WI 54868<br>United States of America |
| Identification of the certified type | A **Multi-Dimensional Measuring instrument**<br>Type : iDimension LTL<br>iDimension LTL-XL<br>iDimension PWD<br>iDimension Flex |
| Characteristics | See next page |

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified Type (represented by the sample(s) identified in the OIML Test Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

**OIML R 129**:2000

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation above-identified.
This Certificate does not bestow any form of legal international approval.

*Important note:* Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Test Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority

**NMi Certin B.V., OIML Issuing Authority NL1**
24 March 2025

Certification Board

NMi Certin B.V.
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INSPECTION
RvA I 122

# OIML Certificate

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The conformity was established by the results of tests and examinations provided in the associated reports:

- No. NMi-2565570-01 dated 2 July 2024 that includes 50 pages;
- No. NMi-2565570-02 dated 2 July 2024 that includes 20 pages;
- No. NMi-3927200-01 dated 24 March 2025 that includes 10 pages.

**Characteristics of the multi-dimensional measuring instrument**

| Principle of operation | Drop and clear [1,3] | | |
|---|---|---|---|
| Maximum dimension | Length | Width | Height |
| | max ≤ 360 cm | max ≤ 240 cm | max ≤ 240 cm |
| Minimum dimension | min ≥ 20 cm | min ≥ 20 cm | min ≥ 20 cm |
| Scale interval d | d ≥ 2 cm | d ≥ 2 cm | d ≥ 2 cm |

| Principle of operation | Stop and go [2,3] | | |
|---|---|---|---|
| Maximum dimension | Length | Width | Height |
| | max ≤ 180 cm | max ≤ 180 cm | max ≤ 210 cm |
| Minimum dimension | min ≥ 30 cm | min ≥ 30 cm | min ≥ 30 cm |
| Scale interval d | d ≥ 2 cm | d ≥ 2 cm | d ≥ 2 cm |

Remarks:

1) With this setting the object is measured on the floor in the field of measurement
2) With this setting the object is measured while being lifted by the forklift. The pallet must be lifted with 5 to 30 cm from the floor. The pallets dimensions are included in the measurement.
3) The multi-dimensional measuring instrument detects automatically the principle of operation.

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| | | |
|---|---|---|
| Principle of measurement | | reflection of light |
| Measuring range | | Single interval |
| Electromagnetic environment class | | E2 |
| Mechanical environment class | | M1 |
| Climatic environment | temperature range | -10 °C / +40 °C |
| | humidity | non-condensing |
| | intended location | Closed |
| Power supply voltage | | 100 – 240 V AC 50/60 Hz |
| Method of operation | | semi-automatic or automatic |
| Limitations of use | All principles | Objects with reflective surface |
| | Stop & go function | Objects can only be measured correctly when the lowest part of the object or transport material (e.g., pallet) is lower than the forks of the forklift. |
| Minimum spacing between successive objects | | spacing ≥ 35 cm<br>(multiple objects simultaneously in the measurement area) |
| Software identification | Version number | 6.1.r.b<br>("r" is for bug fixes, minor updates and updates to the non-legally relevant software. "b" is a numeric build number assigned at the software build time) |

The software identification is displayed after pressing the *i* (information) key in the main screen.

**Revision History**

This revision replaces the previous version.

| Revision | Date | Changes |
|---|---|---|
| 0 | 2024-07-02 | Initial issue. |
| 1 | 2025-03-24 | Lowering the minimum dimensions for the stop & go principle of operation and adding associated limitation of use. |

# EU-type examination certificate

Number **T12563** revision 2
Project number 3927200


Issued by

NMi Certin B.V.,
designated and notified by the Netherlands to perform tasks with respect to conformity assessment procedures mentioned in article 17 of Directive 2014/32/EU, after having established that the Measuring instrument meets the applicable requirements of Directive 2014/32/EU, to:

Manufacturer

Rice Lake Weighing Systems
230 West Coleman St.
Rice Lake, WI 54868
United States of America

Measuring instrument

**Multidimensional measuring instrument**

Type : iDimension LTL
iDimension LTL-XL
iDimension PWD
iDimension Flex

Further properties are described in the annexes:
- Description T12563 revision 2;
- Documentation folder T12563-2.

Valid until

2 July 2034

Initially issued

2 July 2024

Remark

This revision replaces the earlier versions, except for its documentation folder.

Issuing Authority

**NMi Certin B.V., Notified Body number 0122**
24 March 2025

Certification Board

**NMi Certin B.V.**
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# Description



## 1 General information about the multidimensional measuring instrument

All properties of the multidimensional measuring instrument, whether mentioned or not, shall not be in conflict with the legislation.

### 1.1 Essential parts

The controller PC with measurement software;
The sensors.

See block diagram:

| Number | Pages | Description | Remarks |
|---|---|---|---|
| 12563/0-01 | 1 | Block diagram | - |

EMI protection measure:
- The controller PC is built in a metal enclosure.

### 1.2 Essential characteristics

| Principle of operation | Drop and clear [1,3] | | |
|---|---|---|---|
| Maximum dimension | Length | Width | Height |
| | max ≤ 360 cm | max ≤ 240 cm | max ≤ 240 cm |
| Minimum dimension | min ≥ 20 cm | min ≥ 20 cm | min ≥ 20 cm |
| Scale interval d | d ≥ 2 cm | d ≥ 2 cm | d ≥ 2 cm |

| Principle of operation | Stop and go [2,3] | | |
|---|---|---|---|
| Maximum dimension | Length | Width | Height |
| | max ≤ 180 cm | max ≤ 180 cm | max ≤ 210 cm |
| Minimum dimension | min ≥ 30 cm | min ≥ 30 cm | min ≥ 30 cm |
| Scale interval d | d ≥ 2 cm | d ≥ 2 cm | d ≥ 2 cm |

Remarks:
1) With this setting the object is measured on the floor in the field of measurement
2) With this setting the object is measured while being lifted by the forklift. The pallet must be lifted with 5 to 30 cm from the floor. The pallets dimensions are included in the measurement.
3) The multidimensional measuring instrument detects automatically the principle of operation.

| | | |
|---|---|---|
| Principle of measurement | | reflection of light |
| Measuring range | | Single interval |
| Electromagnetic environment class | | E2 |
| Mechanical environment class | | M1 |
| Climatic environment | temperature range | -10 °C / +40 °C |
| | humidity | non-condensing |
| | intended location | Closed |
| Power supply voltage | | 100 – 240 V AC 50/60 Hz |
| Method of operation | | semi-automatic or automatic |
| Limitations of use | All principles | Objects with reflective surface |
| | Stop & go function | Objects can only be measured correctly when the lowest part of the object or transport material (e.g., pallet) is lower than the forks of the forklift. |
| Software identification | Version number | 6.1.r.b<br>("r" is for bug fixes, minor updates and updates to the non-legally relevant software. "b" is a numeric build number assigned at the software build time) |

The software identification is displayed after touching the *i* (information) key in the main screen. From a remote PC the software identification is displayed after pressing the *i* (information) key in the main screen.

### 1.3 Essential shapes

| Number | Pages | Description | Remarks |
|---|---|---|---|
| 12563/0-02 | 1 | LTL outline drawing | - |
| 12563/0-03 | 1 | LTL J-box assembly | - |
| 12563/0-04 | 1 | LTL-XL outline drawing | - |
| 12563/0-05 | 1 | LTL J-box assembly | - |
| 12563/0-06 | 1 | PWD outline drawing | - |
| 12563/0-07 | 2 | PWD controller box assembly | - |
| 12563/1-01 | 1 | Flex ceiling outline drawing | - |
| 12563/1-02 | 1 | Flex floor outline drawing | - |

| Number | Pages | Description | Remarks |
|---|---|---|---|
| 12563/1-03 | 2 | Flex controller box assembly | - |

Inscriptions:
- The inscriptions have to fulfil the requirements stated in Directive 2014/32/EU Annex I clause 9 and OIML R 129-1 (2020) clause 5.3;
- The abbreviations for the minimum capacity and maximum capacity may be written in lower case (min, max) or in sentence case (Min, Max);
- The inscriptions contain the value of the change counter at the time of verification;
- The inscriptions contain limitations of use;
- The inscriptions plate is fixed to the electronics of the multidimensional instrument and is secured against removal by sealing or will be destroyed when removed.
- The inscriptions are repeated in the display and can be selected by:
  - From a remote PC, press "i" button in the top right corner of the QubeVu Manager;
  - From an attached display, press "i".

### 1.4 Conditional parts

The multidimensional measuring instrument may be equipped with one or more of the following protective interfaces that have not to be secured:
- Ethernet.

Power supply:
- AC/DC plug-in power supply: AXIS 30 W Midspan, 2192022.

The multidimensional measuring instrument may be equipped with peripheral equipment if the peripheral equipment is certified to be connected to a multidimensional measuring instrument by a Notified Body responsible for type examination under Directive 2014/31/EU or Directive 2014/32/EU taking into account the applicable electromagnetic environment class.

### 1.5 Non-essential parts

The multidimensional measuring instrument may be connected to non-essential devices, for example but not limited to bar code readers; second displays, etc. provided that:
- They do not present primary data;
- They do not lead to an instrument having other essential characteristics than those fixed by this certificate.

Part(s) not subject to legal control (WELMEC 7.2 clause 2):
The software may contain files or programs that have non-essential properties, for example (but not limited to) invoice modules, database modules and operating system components, provided that they do not lead to an instrument having other characteristics than those fixed by this certificate.

## 2 Information about the main constituent parts of the multidimensional measuring instrument

### 2.1 The controller PC with measurement software

#### 2.1.1 Essential characteristics

Software specification (WELMEC 7.2):
- Software type P;
- Risk Class B;
- Extension L/T/S/D.

Operating system:
- The software runs on the Ubuntu operating system.

Legally relevant software modules are stored in the folder "usr/protected":

| Legally relevant software part | |
|---|---|
| Measurement display | /usr/protected/www/displays/dsdisplay.php<br>/usr/protected/www/displays/touchdisplay_v*.php |
| Measurement calculations, storage and change log | /usr/protected/bin/QVTracker |
| Checksum | /usr/protected/bin/fwcrc.sh |
| Inspector GUI | /usr/protected/www/inspector/insp.php |

- Data Storage file. This file is created during configuration of the system, at which time also the size is set. The file size shall accommodate the storage of all transactions for the required number of days according to the applicable national regulations.
- The data storage file can be accessed from the "Inspector page":
  - From a remote PC, press "i" button in the top right corner of the QubeVu Manager and then select "Audit trail" tab;
  - From an attached display, touch "i" followed by the inspector button and then the "Audit trail" button.

Legally relevant functions of the software:
- Calculation of the dimensions from raw measurement data;
- Static adjustment;
- Looking up dimensions from a protected file;
- Securing the service mode with password and sealing using a change counter (also known as "event counter") that increments each time a parameter change or adjustment is made and saved;
- Calculation of dimensional weight;
- Acting upon significant faults.

Change counter and change log:
- After software locking of the configuration any configuration or parameter change is recorded in the change counter and stored in the change log. These records are protected against modifications and cannot be deleted.
- The change counter and change log can be accessed from the "Inspector page":
  - From a remote PC, press "i" button in the top right corner of the QubeVu Manager and then select "Change Log" tab;
  - From an attached display, press "i" followed by the inspector button and then the "Certification Change Log" button.

Security:
- Upon hardware power-up the measurement software is automatically started;
- Access to the operating system level is controlled using Ubuntu policy settings;
- Access to the software configuration is protected using passwords and change log.

Software protection:
- The software is placed on an internal hard disk;
- The software operates with protected software interfaces;
- The software configuration is protected by login passwords and checksums;
- Configuration settings that do not affect legally relevant data are not protected by checksums;
- Change log for changes in the configuration.

### 2.1.2 Conditional parts

Any PC which has a CE marking may be used for instruments under this certificate, taking into account the applicable electromagnetic environment class where the instrument is in service.

## 2.2 The sensors

### 2.2.1 Essential parts

| Number | Pages | Description | Remarks |
|---|---|---|---|
| 12563/0-08 | 4 | Sensor datasheet | O3D303 sensor |
| 12563/0-09 | 2 | Photos from inside the sensor | - |

## 3 Seals

To secure components that may not be dismantled or adjusted by the user, the multidimensional measuring instrument has to be secured in a suitable manner on the locations indicated in the drawing:

| Number | Pages | Description | Remarks |
|---|---|---|---|
| 12563/0-10 | 1 | Sealing drawings | Sealing position of the sensors |

The sensor positions are physically sealed in their position.
Upon start-up the system verifies connection with the configured sensors. In the case where a sensor is removed from the configuration, the "change counter" increments.

## 4 Conditions for conformity assessment

The marks, facilities for the marks and the inscriptions on the multidimensional measuring instrument fulfil the requirements of Directive 2014/32/EU.

The inscriptions contain the change counter.

When the conformity assessment is performed at a single speed, or at a speed range smaller than the speed range mentioned in the essential characteristics, this single speed or smaller speed range must be recorded on the instrument.

The multidimensional measuring instrument may be connected to an automatic catchweigher provided that this instrument meets the applicable requirements of Directive 2014/32/EU for automatic catchweighers taking into account the applicable electromagnetic environment class.

The multidimensional measuring instrument may be connected to a non-automatic weighing instrument provided that this instrument meets the applicable requirements of Directive 2014/31/EU for non-automatic weighing instruments.