

Issued by NMI Certin B.V.,  
designated and notified by the Netherlands to perform tasks with respect to conformity modules mentioned in Article 13 of Directive 2014/31/EU, after having established that the measuring instrument meets the applicable requirements of Directive 2014/31/EU, to:

Manufacturer A&D Instruments Ltd.  
Unit 24/26 Blacklands Way,  
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Oxfordshire, OX14 1DY,  
United Kingdom

Measuring instrument **A Non-automatic weighing instrument**  
Type : FZ-i series

Further properties are described in the annexes:  
– Description T7678 revision 1;  
– Documentation folder T7678-2.

Valid until 17 May 2030

Remarks This revision replaces the earlier versions, including its documentation folder.

Issuing Authority **NMI Certin B.V., Notified Body number 0122**  
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#### Certification Board

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## 1 General information about the non-automatic weighing instrument

All properties of the non-automatic weighing instrument, whether mentioned or not, shall not be in conflict with the legislation.

This certificate contains references to other certificates. The properties mentioned in these certificates shall be observed in addition to the properties mentioned in this certificate.

### 1.1 Essential parts

The electronics;  
 The mechanical assembly with weighing cell.

See block diagram;

Number	Pages	Description	Remarks
7678/1-01	1	Block diagram	-

EMI protection measure:

- additional noise filters L2XX.

### 1.2 Essential characteristics

Accuracy class	II
Maximum capacity	$122 \text{ g} \leq \text{Max} \leq 3200 \text{ g}$ or $610 \text{ ct} \leq \text{Max} \leq 16000 \text{ ct}$
Verification scale interval	$e \geq 0,01 \text{ g}$ or $e \geq 0,1 \text{ ct}$
Actual scale interval	$e = 10 \text{ d}$
Weighing range(s)	Single interval
Maximum number of scale intervals	$n \leq 32000$
Tare	$T \leq -100\%$
Temperature range	$+10 \text{ }^\circ\text{C} / +30 \text{ }^\circ\text{C}$
Power supply voltage	$100 - 240 \text{ V AC } 50/60 \text{ Hz}$
Software identification	P-4.xxx (x = 0... 99)

The software identification is displayed at start-up.

The non-automatic weighing instrument has embedded software.

## 1.3 Essential shapes

Number	Pages	Description	Remarks
7678/1-02	2	Exploded view	-

The data plate is secured against removal by sealing or will be destroyed when removed.

Inside the cabinet is an adjustment lock, located on the main board.

## 1.4 Conditional parts

The non-automatic weighing instrument may be equipped with peripheral equipment which is used for the applications listed in Article 1(2), (a) to (f) of Directive 2014/31/EU, provided that the peripheral equipment is certified to be connected to a non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2014/31/EU, or, that the equipment and the use of the equipment complies with the requirements of WELMEC 2.5 Issue 2 clause 2.2.

The non-automatic weighing instrument is fitted with a levelling device and a level indicator, unless the instrument is installed in a fixed position. A ring on the level indicator indicates when the maximum tilt is exceeded.

The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:

- RS232C;
- USB (only for devices placed on the market between 17 May 2010 and 17 May 2020);
- Ethernet (only for devices placed on the market between 17 May 2010 and 17 May 2020).

Power supply:

- AC/DC plug-in power supply: UUX310-1210.

## 1.5 Non-essential parts

The non-automatic weighing instrument may be connected to non-essential devices, for example but not limited to bar code readers, foot switches, second displays and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in Article 1(2), (a) to (f) of Directive 2014/31/EU unless the "Preliminary observation" in Annex I of the Directive is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this certificate.

Other non-essential parts:

- Internal battery (only for devices placed on the market between 17 May 2010 and 17 May 2020).

## 2 Information about the main constituent parts of the non-automatic weighing instrument

### 2.1 The electronics

#### 2.1.1 Essential parts

Number	Pages	Description	Remarks
7678/1-03	1	A/D board	-
7678/1-04	4	Mainboard	including part list

#### 2.1.2 Essential characteristics

List of legally relevant functions:

- Determination stability of equilibrium, with fast, medium or slow response;
- Combined semi-automatic zero-setting and subtractive tare balancing;
- Initial zero-setting;
- Zero-tracking;
- Initial subtractive tare balancing;
- Indication of stable equilibrium;
- Calibration / set-up mode via a switch on the power source board;
- Automatic span adjustment with internal calibration mass; operational after:
  - after switch on;
  - when  $\Delta t \leq 3 \text{ }^\circ\text{C}$ ;
  - completing a fixed algorithm.
- Semi-automatic span adjustment with external calibration mass via a switch on the power source board;
- Acting upon significant faults;
- Checking the display;
- Weighing unstable samples;
- Weight unit selection (g, mg, ct, ozt);
- Percentage mode;
- Piece counting mode;
- Statistical calculation mode.

#### 2.1.3 Non-essential parts

Display;  
 Keyboard.

## 2.2 The mechanical assembly with weighing cell

### 2.2.1 Essential parts

Number	Pages	Description	Remarks
7678/1-02	2	Exploded view	-
7678/1-05	2	Weighing cell	-

### 2.2.2 Essential characteristics

$e \geq E_{\max} / 32000$

### 2.2.3 Essential shapes

See 2.2.1.

## 3 Seals

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the drawings:

Number	Pages	Description	Remarks
7678/1-06	1	Markings and sealing	-

## 4 Conditions for conformity assessment

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfil the requirements of point 1 of Annex III of Directive 2014/31/EU.