EU-type examination certificate

Number **T6969** revision 3
Project number SO16202354

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. 24 Blacklands Way Abingdon Business Park OX14 1DY Abingdon, Oxfordshire United Kingdom
Measuring instrument	A **Non-automatic weighing instrument** Type : EK-610i-EC & EK-6100i-EC
	Further properties are described in the annexes: – Description T6969 revision 3; – Documentation folder T6969-2.
Valid until	15 June 2026
Remarks	This revision replaces the earlier versions, except for its documentation folder.
Issuing Authority	**NMi Certin B.V., Notified Body number 0122** 15 June 2016

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INSPECTION
RvA I 122

Description

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.

1.1 Essential parts

See block diagram:

Number	Pages	Description	Remarks
6969/0-01	1	Block diagram	-

The electronics;
The mechanical assembly with load cell.

EMI protection measures:
- A/D board shielded with metal cover;
- Ferrite in cable between RS232C input and main board;
- Ferrite on optional comparator relay output board;
- Ferrite in optional battery pack (between connector and battery board).

1.2 Essential characteristics

Accuracy class	(II)	(III)
Maximum capacity	600 g ≤ Max ≤ 6000 g	400 g ≤ Max ≤ 6000 g
Verification scale interval	e ≥ 0,1 g	
Actual scale interval	e = d, or e = 10 d	e = d
Weighing range	Single interval	
Maximum number of scale intervals	n ≤ 6000 divisions	
Tare	T ≤ -Max	
Temperature range	+5 °C / +35 °C	
Power supply voltage	7 - 10 V DC supplied by AC/DC plug-in power supply, or internal rechargeable Ni-MH battery pack of 4,8 V	
Software identification	Version number: P-3.xx (xx = 00 to 99 and shows the non-legally relevant part)	

Software:
- The identification number will be displayed after pressing the key sequence (valid for software versions P-3.xx and newer):
  - Press and hold “Sample” key.
- The non-automatic weighing instrument has embedded software.

1.3 Essential shapes

Number	Pages	Description	Remarks
6969/0-02	1	Exploded view	-
6969/0-03	1	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. The level indicator has a sensitivity of at least 2 mm for a tilt of 2/1000.

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;
- AC/DC plug-in power supply;
- Comparator relay output (optional);
- Underhook assembly (optional).

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
6969/0-04	2	PCB lay out	Initial version
6969/0-05	2	Parts list	Initial version
6969/1-01	2	PCB lay out	Revised version
6969/1-02	2	Parts list	Revised version

2.1.2 Essential characteristics

List of legally relevant functions:
- Determination stability of equilibrium;
- Indication stability of equilibrium;
- Zero indicator;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic zero-setting and semi-automatic subtractive tare balancing operated by the same key;
- Adjustment / set-up mode and gravity compensation via a switch on the main board;
- Acting upon significant faults;
- Checking the display;
- Percent (%) mode;
- Counting mode;
- Comparator mode with upper and lower limits;
- Digital printing;
- Extended indicating, resolution 1/10 e during pressing a key (for class (III) only);
- Auxilary indicating device with differentiated scale division (for class (II) only).

2.1.3 Conditional parts

The interface section is located on the main board. The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:
- RS232C.

The interface cable connected to the instrument will not be longer than 30 meters.

2.1.4 Non-essential parts

Display;
Keyboard.

2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Number	Pages	Description	Remarks
6969/0-06	1	Load cell specifications	-

2.2.2 Essential characteristics

$e \geq E_{max} / 7350$;
Excitation power supply 5 V DC.

2.2.3 Essential shapes

See chapter 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 drawing:

Number	Pages	Description	Remarks
6969/0-07	1	Sealing diagram	-

4 Conditions for conformity assessment

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