

Issued by NMI Certin B.V.  
Hugo de Grootplein 1  
3314 EG Dordrecht  
The Netherlands

In accordance with The Council Directive 2009/23/EC on non-automatic weighing instruments.

Manufacturer A&D Instruments Ltd.  
24 Blacklands Way  
Abingdon Business Park Abingdon  
Oxford, OX14 1DY  
United Kingdom

In respect of A class **(III)**, electronic, single-interval, **non-automatic weighing instrument**.  
Manufacturer mark/name: A&D  
Type : SW-Series

Characteristics  $6 \text{ kg} \leq \text{Max} \leq 150 \text{ kg}$   
 $e \geq 2 \text{ g}$   
 $n \leq 3000$  divisions  
Temperature range  $-10 \text{ }^\circ\text{C} / +40 \text{ }^\circ\text{C}$   
In the description number T7942 revision 1 further characteristics are described.

Valid until 29 September 2021

Description and documentation The instrument is described in the description number T7942 revision 1 and documented in the documentation folder T7942-1, appertaining to this EC type-approval certificate.

Remarks This revision EC type-approval certificate replaces the earlier version, except for its documentation folder.

The Notified Body no. 0122  
NMI Certin, 7 November 2011

  
C. Oosterman  
Head Certification Board

**NMI Certin B.V.**  
Hugo de Grootplein 1  
3314 EG Dordrecht  
The Netherlands  
T +31 78 6332332  
certin@nmi.nl  
www.nmi.nl

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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, may not be in conflict with the legislation.

### 1.1 Essential parts

See drawing Block chart, drawing number 7942/0-01;  
The electronics;  
The mechanical assembly with load cell.

EMC protection measures:

- The A/D board is shielded with a metal cover;
- A ferrite coil on the power supply cable;
- A ferrite coil on the input/output processing board;
- A ferrite coil on the cable from the calibration board to the main board.

### 1.2 Essential characteristics

- Power supply: 100 - 240 V AC, 50/60 Hz;
- Internal rechargeable battery 6V DC.

### 1.3 Essential shapes

The non-automatic weighing instrument is built according to the drawings:

- Structural chart SW-6KS, SW-15KS, drawing number 7942/0-02;
- Structural chart SW-15KM, SW-30KM, SW-60KM, SW-150KM, drawing number 7942/0-03;
- Structural chart SW-60KL, SW-150KL, drawing number 7942/0-04;
- Structural chart Indicator, drawing number 7942/0-05.

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

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:

- Sealing, drawing number 7942/0-06, and the load cell cable or the junction box has to be secured.

Inside the cabinet is a calibration lock, located on the load cell connection 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) of Directive 2009/23/EC, if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC.

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.

## 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 display's and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of Directive 2009/23/EC unless the "preliminary observations" in Annex 1 of this directive is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this type-approval document.

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

### 2.1 The electronics

#### 2.1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Main Board	7942/0-07	-	Layout including part specifications

#### 2.1.2 Essential characteristics

List of devices:

- Determination stability of equilibrium;
- Zero indicator;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Indication of stable equilibrium;
- Calibration / set-up mode via a switch on the load cell connection board;
- Gravity compensation via a switch on the load cell connection board;
- Acting upon significant faults;
- Checking the display;
- Counting mode;
- Weight unit selection (kg, g).
- Indications other than primary indications.

## 2.1.3 Conditional parts

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

- RS232C;
- RS422/485;
- Discrete I/O's.

## 2.1.4 Non-essential parts

Display;  
 Keyboard.

## 2.2 The mechanical assembly with load cell

### 2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Load cell SW-6KS, SW-15KS	7942/0-08	-	
Load cell SW-15KM, SW-30KM, SW-60KM, SW-150KM, SW-60KL, SW-150KL	7942/0-09	-	

### 2.2.2 Essential characteristics

$e \geq E_{\max}/3000$ ;  
 Excitation power supply 5,0 V DC.

### 2.2.3 Essential shapes

See chapter 2.2.1, essential parts.

## 3 Approval conditions

See chapter 1.3, essential shapes.

## 4 Seals and verification marks

See chapter 1.3, essential shapes.

## 5 CE-mark of conformity and inscriptions

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfill the requirements of article 1 of Annex IV of Directive 2009/23/EC.