

Nederlands Meetinstituut

# EC type-approval certificate

Number **T5300** revision 0  
Project number 10091314  
Page 1 of 4

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

Notified Body Number 122

In accordance with The Council Directive 90/384/EEC on non-automatic weighing instruments.

Applicant A&D Instruments Ltd.  
Abingdon Science Park  
Abingdon, Oxford, OX14 3YS  
United Kingdom

In respect of A class **II**, electronic, single-interval **non-automatic weighing instrument**.  
Manufacturer : A&D  
Type : EK-H

Characteristics  $n \leq 6000$  divisions  
 $600 \text{ g} \leq \text{Max} \leq 6000 \text{ g}$   
 $e \geq 0.1 \text{ g}$   
 $e = d$  or  $e = 10d$


Temperature range  $+10^\circ\text{C} / +30^\circ\text{C}$

In the description number T5300 revision 0 further characteristics are described.

Valid until 21 July 2008

Description and documentation The instrument is described in the description number T5300 revision 0 and documented in the documentation folder T5300-1, appertaining to this EC type-approval certificate.

Dordrecht, 21 July 1998  
NMI Certin B.V.

  
M. Charité  
Director

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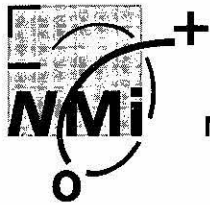
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## 1 General information about the non-automatic weighing instrument

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 diagram, drawing number EK-H003;  
The electronics;  
The mechanical assembly with load cell.

EMC protection measures:

- The A/D board is shielded with a metal cover.

### 1.2 Essential characteristics

Power supply: 8 - 15 V DC.

### 1.3 Essential shapes

The non-automatic weighing instrument is built according to drawing The type, drawing number EK-H001.

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 Descriptive markings & sealing, drawing number EK-H002.

The securing component has to bear either:

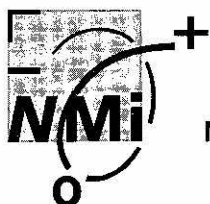
- a mark of the manufacturer laid down in a notified body approved quality system (Annex II of the directive 90/384/EEC), or
- an official mark of a Member State of the EEC, or an other party to the EEA agreement.

Inside the cabinet is a calibration lock, located on the back side of the instrument.

### 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 the EC Directive (90/384/EEC), if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body appointed to certify non-automatic weighing instruments according to paragraph I of Annex II of the EC directive on Non-Automatic Weighing Instruments.

A level indicator with 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 display's and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of the EC Directive (90/384/EEC) 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.

Battery;

AC/DC-adapter;

Underhook.

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

### 2.1 The electronics

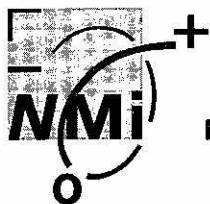
#### 2.1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Main board / Power board / A to D converter Parts list and Layout	EK-H004	-	

#### 2.1.2 Essential characteristics

List of devices:

- indication of stable equilibrium;
- determination stability of equilibrium;
- initial zero-setting;
- combined semi-automatic zero-setting and tare balancing;
- zero-tracking;
- zero indicator;
- calibration / set-up mode via a switch inside the instrument;
- comparator;
- piece counting;
- percentage mode;
- changing from g to lb (only for countries where the use of lb is allowed) or ct;
- acting upon significant faults;
- checking the display.



## 2.1.3 Conditional parts

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

- RS232C;
- current loop;
- comparator output.

## 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
Exploded view	EK-H005	-	

### 2.2.2 Essential characteristics

$e \geq E_{\max}/6000$ .

### 2.2.3 Essential shapes

See drawing: Exploded view, drawing number EK-H005.

## 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 fulfil the requirements of article 1 of Annex IV.