



EC type-approval certificate

Number **T7046** revision 0
Project number 606437
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Issued by NMI Certin B.V.
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The Netherlands

Notified Body Number 0122

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

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

In respect of A class **I** and **II**, electronic, single-interval, **non-automatic weighing instrument**, not intended to be used for direct sales to the public.
Manufacturer : A&D
Type : GX-8K / GX-10K / GX-12K / GX-20K / GX-30K

Characteristics	I	II
	8.1 kg ≤ Max ≤ 10.1 kg	12 kg ≤ Max ≤ 31 kg
	e = 0.1 g	e = 1 g
	d = 0.01 g	d = 0.1 g
	n ≤ 10100 divisions	n ≤ 31000 divisions

Operating temperature range: +10 °C / +30 °C
In the description number T7046 revision 0 further characteristics are described.

Valid until 30 November 2016

Description and documentation The instrument is described in the description number T7046 revision 0 and documented in the documentation folder T7046-1, appertaining to this EC type-approval certificate.

Dordrecht, 30 November 2006
NMI Certin B.V.

Ing. C. Oosterman
Manager Product Certification

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 GXK003.

- The electronics;
- The mechanical assembly with weighing cell.

EMC protection measures:

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

1.2 Essential characteristics

Power supply: 230 V AC, 50 Hz to 12 V DC adapter.

1.3 Essential shapes

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

- "Exploded view", drawing number GXK001.

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 diagram", drawing number GX-K-EC Series.

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 another party to the EEA agreement.

Inside the cabinet is a calibration switch, located on the interface boards.

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.

The printer shall add the brackets around the auxiliary indications.

The non-automatic weighing instrument is fitted with a leveling device and a level indicator, unless the instrument is installed in a fixed position.

The sensitivity for class **I** shall be at least 2 mm for a tilt of 2/1000.

The sensitivity for class **II** shall be at least the limiting value of the level indicator.

1.5 Non-essential parts

- AC/DC-adapter.

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.

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
Drawings Main parts	GXK005	-	Drawing & parts list (5 pages)

2.1.2 Essential characteristics

List of devices:

- Determination stability of equilibrium;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic subtractive tare balancing;
- Pre-set tare (Digital input mode);
- Indication of stable equilibrium;
- Calibration / set-up mode via a button on the main board;
- Automatic span adjustment with internal calibration mass; operational when:
 - After switch-on;
 - $\Delta t \leq 3^{\circ}\text{C}$;
 - After completing a fixed algorithm.
- Semi-automatic span adjustment with internal calibration mass;
- Semi-automatic span adjustment with external calibration mass;
- Acting upon significant faults;
- Checking the display;
- Weighing unstable samples (Hold);
- Under hook weighing;
- Auxiliary indicating with differentiated scale interval;
- Weight unit selection (g, mg, ct);
- Counting device (PCS);
- Percentage indication (%);
- Determination of the density of a mass measured in air and liquid;
- Totalization;
- Indications other than primary indications;
- Indication of additional information;
- Memory storage.

2.1.3 Conditional parts

The interface section is located 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;
- Analogue output;
- Comparator output;
- Current loop output;
- Input for foot switch.

2.1.4 Non-essential parts

- Display;
- Keyboard.

2.2 The mechanical assembly with weighing cell

2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Weighing cell SHS	GXK001	-	Page 3 of 8

2.2.2 Essential characteristics

Maximum capacity of the weighing cell for class **I**:
- Max 10.1 kg with $e = 0.1$ g.

Maximum capacity of the weighing cell for class **II**:
- Max 31 kg with $e = 1$ g.

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.