

Manufacturers

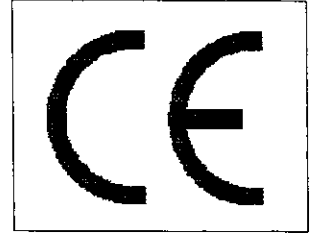
Declaration Of Conformity

Product identification

Product : The Non-Automatic Weighing Instrument.

Brand : CAS Corporation.

Type : **LP-1**. Version : 00.



Means of conformity

The product is in conformity with following Directives based on test results using the following harmonized standards.

Testing for CE marking

- EMC (Directive : 89/336/EEC)

Carried out by : NMi.

Hugo de Grootplein 1, Dordrecht, Netherlands.

Standards used : EN 50081-1 (1992)

Project No. : 10044270.rep

- LVD (Directive : 73/23/EEC)

Carried out by : SKY ENGINEERING CO., LTD.

5FL Soosung BLDG, 462-1, Amsa-Dong, Kangdong-Ku, Seoul, Korea.

Standards used : EN 60950 (1992), +A1 (1993), +A2 (1993), +A3 (1995), +A4 (1996)

Test Report No. : SE-ETS-981117-01.

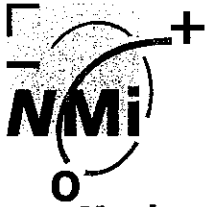
Manufacturer : CAS Corporation

#19, Ganap-Ri, Kwangjuk-Mean, Kyeonggi-Do, Rep of KOREA.

Name : Sang-Zee Lee.
Position : Director.
Date : 12 April, 1999.

Signature

A handwritten signature in black ink, followed by the date '4/12/99' written below it.



Nederlands Meetinstituut

Member State
The Netherlands

OIML Certificate N°
R76/1992-NL-94.1 2

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: NMI IJkwezen B.V.
Address: Hugo de Grootplein 1, Dordrecht
Person responsible: M. Charité

Applicant

Name: CAS Corporation
Address: CAS Building #440.1 Sungnae-Dong, Kangdong-KU, Seoul, Korea

Manufacturer of the certified pattern

Name: Cas Corporation
Address: CAS Building #440.1 Sungnae-Dong, Kangdong-KU, Seoul, Korea

Identification of the certified pattern

Type: LP
Classe **III**
 $6 \text{ kg} \leq \text{Max} \leq 30 \text{ kg}$
 $e = d$
 $n \leq 3000$ divisions

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report, the EC type-approval certificate and the description with number T2487 and the documentation folder number T2487-1) with the requirements of the following Recommendation(s) of the International Organization of Legal Metrology (OIML):
R76
edition 1992
for accuracy class **III**

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation(s).

This certificate does not bestow any form of legal international approval.



Nederlands Meetinstituut

OIML Certificate N°
R76/1992-NL-94.12

The conformity was established by tests described in the associated test report N° R76/1992-NL-94.12, that includes 57 pages.

The issuing authority
M. Charité

19 December 1994

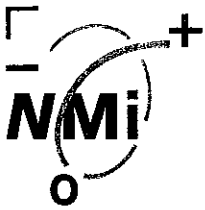
The OIML president
G.J. Faber

19 December 1994

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Important note: Apart from the mention of the certificate's reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

Page 2. This certificate includes 2 pages.



Nederlands Meetinstituut

EC type-approval certificate

Number **T2487** revision 4
Project number 10097202
Page 1 of 5

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 CAS Corporation
#19 Kanap-ri Kwangjuk-Myun
Yangju-Gun KyungKi-Do
South Korea

In respect of A class **III**, graduated, self-indicated, price computing and labelling, electronic **non-automatic weighing instrument**, (intended to be used for direct sales to the public).
Manufacturer: CAS Corporation
Type : LP-1 , LP-T and XP

Characteristics $n \leq 3000$ divisions
 $6 \text{ kg} \leq \text{Max} \leq 30 \text{ kg}$
 $T \leq - 50\%$ of Max
In the description number T2487 revision 4 further characteristics are described.

Valid until 19 December 2004

Description and documentation The instrument is described in the description number T2487 revision 4 and documented in the documentation folder T2487-2, appertaining to this EC type-approval certificate.

Remarks This revision replaces the earlier version, except for its documentation folder.

Dordrecht, 18 November, 1998
NMI Certin B.V.

M. Charité

M. Charité
Director

Nederlands Meetinstituut
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NMI B.V. (Chamber of Commerce Haaglanden
No.27228701)

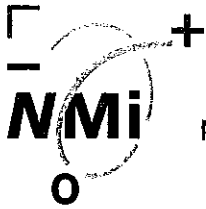
Subsidiary companies:
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NMI International B.V. (27239176)

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BY STERLAB
Reg. nr. L 029



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 connection diagram, drawing page 4 and 6054-LP0-0030;
Electronics;
Mechanical assembly with weighing cell.

EMC protection measures for instruments according connection diagram page 4:

The following cables are provided with a ferrite :

- Between Power PCB and Printer controller;
- Between Power PCB and Transformer (2X);
- Between Load cell and A/D converter;
- Between A/D board and Main board;
- Between Main board and rear display (2 X);
- Between Main board and CN5.

The A/D board is shielded with a metal cover. On the power input a noise filter is mounted .

1.2 Essential characteristics

Power supply: 220-240 or 110-120 V AC, 50/60 Hz.

The instrument can be used in a master/slave configuration, as a master or as a slave.

1.3 Essential shapes

The non-automatic weighing instrument is built according to drawings

- 2-1) Standard
- 2-2) R-type.

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 method" with drawing number 6064-LP0-0010.

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 behind the sealing plastic cover under the load receptor of the NAWI.

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 non-automatic weighing instrument may be equipped with an Electronic Point of Sale (EPoS) or an Electronic Cash Register (ECR), if these EPoS and ECR are 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 non-automatic weighing instrument may be equipped with Electronic Funds Transfer equipment (EFT/ECU), if these EFT/ECU represent only the price total on the display.

A level indicator with a sensitivity of at least 2 mm for a tilt of 2/1000.

The NAWI may be equipped with an internal printer to produce a sticker or a ticket.

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.

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 PCB location	6014-A00-0564	0	3 pages incl. part list
	6114-A00-0566	-	3 pages incl. part list
Power PCB location	6034-A00-0112	0	3 pages incl. part list
	6114-A01-0115	0	2 pages incl. part list
Analog PCB location	6144-A00-0065	0	2 pages incl. part list

2.1.2 Essential characteristics

List of devices:

- indicating device;
- indicating component;
- device to determine stability of equilibrium;
- zero indicating device;
- semi-automatic zero-setting device;
- initial zero-setting device;
- zero-tracking device;
- semi-automatic subtractive tare balancing device;
- semi-automatic calibration device;
- device that acts upon significant faults;
- device to check the display;
- price calculation device.

When equipped with a printer the following devices may be present:

- memory storage device;
- non-weight articles function;
- PLU's;
- Master / slave configuration.

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;
- RS485.

2.1.4 Non-essential parts

Display;
 Keyboard;
 Printer control board.

2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Body & display assy	6004-LP0-0010	0	Mechanical assembly with load cell

2.2.2 Essential characteristics

$e \geq E_{\max}/5000$;

Utilization of the load cell $\geq 60\%$

Excitation power supply 12 V DC.

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.