Australian Government
Department of Industry, Science, Energy and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4D/396

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

CAS Model CN1-15P Weighing Instrument

submitted by CAS Corporation
#262, Geurugogae-ro, Gwangjeok-myeon
Yangju-si, Gyeonggi-do
Republic of Korea

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated October 2015.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 2 approved – certificate issued	19/04/22

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/396' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate of Approval No S1/0B.

Special Conditions of Approval

Certain aspects of this instrument (in particular transaction record printing formats) are able to be configured by the user. Whilst NMI believes that acceptable formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Darryl Hines
Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/4D/396

1. Description of Pattern approved on 19/04/22

A CAS model CN1-15P class (III) self-indicating multi-interval non-automatic price-computing weighing instrument (Figure 1 and Table 1) with a verification scale interval (e_1) of 0.002 kg up to 6 kg and with a verification scale interval (e_2) of 0.005 kg from 6 kg up to 15 kg, and with a minimum capacity of 0.04 kg.

The instrument has a double-sided column-mounted colour LCD display panel. For each side, the display is used for the presentation of weight, unit price and price information, zero, net indications and functions relating to product look up (PLU) items.

Instruments are fitted with an integral receipt printer, for printing of labels or tickets (#).

Instruments have unit price up to $9999.99/kg, price up to $99999.99, and a product look up (PLU) facility.

Instruments are fitted with a 380 mm x 250 mm platform.

The instrument operates from mains AC power (100-240 V AC, 50/60 Hz).

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices.

(#) Refer to the Special Conditions of Approval in the certificate.

1.1 Zero

A zero-tracking device may be fitted.

The initial zero-setting device of the pattern has a nominal range of approximately 20% of the maximum capacity of the instrument.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

1.2 Tare

A semi-automatic subtractive tare device and/or a non-automatic keyboard-entered pre-set subtractive tare device, each of up to 5.998 kg capacity may be fitted.

Pre-set tare values may be associated with product look up (PLU) items.

A separate display of tare values is provided.

1.3 Levelling

The Instrument is provided with adjustable feet and a level indicator.

The instrument is to be used in a level condition as indicated by the level indicator.

1.4 Display Check

A display check is initiated whenever power is applied.

1.5 Verification Provision

Provision is made for the application of a verification mark.

1.6 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	CAS Corporation #3
Indication of accuracy class	(III)
Pattern approval number for the instrument	NMI 6/4D/396
Maximum capacity	*Max* ..... g or kg #1
Minimum capacity	*Min* ..... g or kg #1
Verification scale interval	*e* = ... g or kg #1
Maximum subtractive tare	*T* = - ……. g or kg #2
Serial number of the instrument	……..

#1 These markings are shown near the display of the result.

#2 This marking is required if *T* is not equal to *Max*.

#3 Manufacturer may also be CAS (Zhejiang) Electronics Co. Ltd or CAS Elektronik San. Tic. A.S. or CAS Deutschland AG.

Notes:

For multi-interval instruments the markings shall be as above, with the exception that the 'Maximum capacity' and 'Verification scale interval' shall be marked for both interval ranges, e.g. as follows:

Maximum capacity	*Max* ...../..... kg
Verification scale interval	*e* = .../..... kg

1.7 Networking

A number of instruments may be connected in a network to share common PLU data, and to accumulate and retrieve management information.

In addition, the network may be interfaced with a computer for the collection of management data, or the downloading of PLU data.

Note: The weighing and price computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate re-verification of any other weighing instrument in the network.

1.8 Interfaces

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with General Supplementary Certificate of Approval No S1/0B (in particular in regard to the data and its format).

Instruments may be fitted with RS232, Ethernet, USB, WiFi and cash drawer.

1.9 Sealing Provision

Provision is made for the access to the calibration button to be sealed by means of lead and wire type seals with drilled screws or a destructible adhesive label placed over the securing screws on the cover plate underneath the instrument as shown in Figure 2.

1.10 Software

The software is designated AU V3.xx.xx.ZZZZZ or V3.xx.xx.ZZZZZ, where

- xx.xx is reflecting non-legally relevant changes and may be numbers, letters, symbols or blank.

- ZZZZZ is a dealer or function code and may be numbers, letters, symbols or blank.

The software version and number can be seen in the switch-on display sequence (when the power is first applied to the instrument).

2. Description of Variant 1 **approved on 19/04/22**

The CAS model CN1-P multi-interval instruments in certain other capacities as listed in Table 1 (the pattern is shown in **bold**).

Table 1

Maximum Capacity (Max_1/Max_2)	Minimum Capacity (*Min*)	Verification Scale Interval (e_1/e_2)	Subtractive Tare Capacity (T = -…)
3/6 kg	0.020 kg	0.001/0.002 kg	2.999 kg
6/15 kg	**0.040 kg**	**0.002/0.005 kg**	**5.998 kg**
15/30 kg	0.100 kg	0.005/0.010 kg	9.995 kg

3. Description of Variant 2 **approved on 19/04/22**

The CAS model CN1-P single interval instruments in certain capacities as listed in Table 2.

Table 2

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (*e*)	Subtractive Tare Capacity (T = -…)
6 kg	0.040 kg	0.002 kg	2.998 kg
15 kg	0.100 kg	0.005 kg	5.995 kg
30 kg	0.200 kg	0.010 kg	14.990 kg

TEST PROCEDURE No 6/4D/396

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

For multi-interval and multiple range instruments with verification scale intervals of e_1, e_2 …, apply e_1 for zero adjustment, and maximum permissible errors apply e_1, e_2 …, as applicable for the load.

FIGURE 6/4D/396 – 1

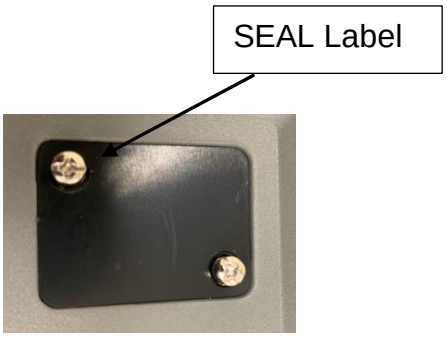
(a) Front view

(b) Rear view

CAS Model CN1-P Weighing Instrument (Pattern)

FIGURE 6/4D/396 – 2

(a) Sealing of Lead and Wire Type with Drilled Screws



(b) Sealing of Destructible Adhesive Label

Typical Sealing Method

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