Australian Government
Department of Industry, Science and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4D/409

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.

Ishida Model UNI-8 B Weighing Instrument

submitted by Heat and Control Pty Ltd
407 Creek Road
MT GRAVATT QLD 4122

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 4 approved – certificate issued	13/04/26

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/409' and only by persons authorised by the submittor.

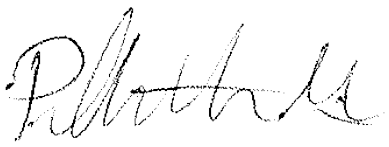
It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this 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 No S1/0B.

Special Conditions of Approval:

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket 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*.



Phillip Mitchell
A/g Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/4D/409

1. Description of Pattern approved on 13/04/26

An Ishida model UNI-8 B class (III) non-automatic self-indicating price-computing multi-interval weighing instrument (Figure 1 and Table 1) with a verification scale interval (e_1) of 0.002 kg up to 6 kg and a verification scale interval (e_2) of 0.005 kg from 6 kg up to the maximum capacity of 15 kg.

The instrument has a 10.1 inch TFT LCD touchscreen display and keyboard for the operator and a 7 inch TFT LCD screen display for the customer and both attached to the instrument. Both displays are used for the presentation of tare, weight, unit price and price information, zero, net indications and functions relating to product look up (PLU) items.

Instruments are fitted with an integral printer, for printing of tickets or labels.

Instruments display unit price to $9999.99/kg, total price to $999999.99, and have a product look up (PLU) facility.

Instruments are approved for use over a temperature range of −5 °C to +40 °C, and are so marked.

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.

1.1 Zero

A zero-tracking device may be fitted.

The initial zero-setting device of the pattern has a nominal range of not more than 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 and/or non-automatic keyboard-entered pre-set subtractive tare device, each of up to 5.998 kg, 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 Display Check

A display check is initiated whenever power is applied.

1.4 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.

1.5 Networking

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

In addition, the instrument may be interfaced with a computer for the collection of management data, 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.

1.6 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 R 76 (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 Supplementary Certificate No S1/0/B (in particular in regard to the data and its format).

Instruments may be fitted with Ethernet, USB, RJ-11 and audio.

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Shanghai Ishida	
Mark or name of manufacturer's agent	Heat & Control Pty Ltd	
Indication of accuracy class	(III)	
Pattern approval mark for the instrument	NMI 6/4D/409	
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* = − ..... kg	#2
Serial number of the instrument	……..	
Special temperature limits	−5 °C to +40 °C	

#1 These markings are shown in the electronic marking field below the display of the result.

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

Note:

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* ...../..... g or kg
Verification scale interval	*e* = .../..... g or kg

1.9 Sealing Provision

Provision is made for access to the 'calibration save' switch to be sealed by means of destructible adhesive labels placed over the securing screw on the cover plate underneath the load receptor and the 'calibration save' switch access as shown in Figure 7a.

1.10 Software

The legally relevant software versions are designated:

Title software	E6225x (models with 15.6 inch operator display) E6223x (models with 10.1 inch operator display) (where x represents non-legally relevant changes)
Main application	E6224x (models with 15.6 inch operator display) E6222x (models with 10.1 inch operator display) (where x represents non-legally relevant changes)
Scale driver	E6201
Scale updater	E6200

The scale and printer embedded software version is designated D026B and is protected by a checksum number 6177.

The instructions for accessing the software versions and numbers are as follows (starting from normal weighing mode):

Press the  Return button. The "Menu' screen is displayed.

Press the  ADJUST button. The  FIRMWARE DETAILS button is displayed.

Press the  FIRMWARE DETAILS button. The software versions and numbers are displayed as shown in Figure 4a.

2. Description of Variant 1 approved on 13/04/26

Certain other capacities of the Ishida model UNI-8 series instruments as listed in Table 1 below (the pattern is shown in **bold**).

TABLE 1

Maximum Capacity *(Max$_1$/ Max$_2$)*	Minimum Capacity (Min)	Verification Scale Interval *(e_1 / e_2)*	Maximum Subtractive Tare Capacity (*T* = - …)	Load Cells used
6/15 kg	**0.04 kg**	**0.002/0.005 kg**	**5.998 kg**	**Zemic L6D-C3-25kg-0.4B-WD 25 kg**
15/30 kg	0. 1 kg	0.005/0.01 kg	9.995 kg	Zemic L6D-C3-50kg-0.4B-WD 50 kg

3. Description of Variant 2 approved on 13/04/26

The Ishida model UNI-8 series as single interval instruments in certain capacities as listed in Table 2 below.

TABLE 2

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (e)	Maximum Subtractive Tare Capacity (*T* = - …)	Load Cells used
15 kg	0.1 kg	0.005 kg	5.995 kg	Zemic L6D-C3-25kg-0.4B-WD 25 kg

4. Description of Variant 3 approved on 13/04/26

An Ishida model UNI-8 P (Figure 2), which is similar to the pattern and variants 1 & 2, but has the customer display mounted on a column, with the display and keyboard for the operator attached to the instrument.

5. Description of Variant 4 approved on 13/04/26

An Ishida model UNI-8 EV (Figure 3), which is similar to the pattern and variants 1 & 2, but has the operator display and customer display mounted on a column.

Instruments may be fitted with a 15.6 inch TFT LCD touchscreen operator display.

6. Description of Variant 5 approved on 13/04/26

An Ishida model UNI-8 SS (Figure 4) which is similar to variant 4 without a customer display but used in a self-service arrangement which provides a product look up keyboard(s), as well as providing tare, weight, unit price and price displays. A display of tare values (which may be stored against PLU items) is also provided.

Note 1: It is not required that access to the zero setting facility be available to customers in a self-service arrangement. However access to the zero setting facility shall be available to staff of the particular store, and it is expected that measures will be in place to ensure that the zero condition of the instrument is checked regularly.

Note 2: When used in a self-service arrangement, all keys on the touch screen keyboard, other than the REZERO key, may be disabled or removed. The TARE key is not functional with this arrangement. The use of totalisation across instruments (‘floating system’) arrangement is not approved for use in self-service arrangement.

7. Description of Variant 6 approved on 13/04/26

An Ishida model UNI-8 RP (Figure 5) which is similar to the pattern but fitted with an external basework (the integral basework of the pattern is either not provided or is disabled).

7.1 Levelling

Instruments are provided with adjustable feet and a level indicator. The level indicator (bubble) is located on external basework underneath the weighing receptor. A notice indicating the location of the level indicator (e.g. “Level bubble provided under platform” or similar) shall be provided in a location clearly visible to the operator.

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

7.2 Sealing Provision

Provision is made for the calibration adjustments to be sealed by preventing access the 'calibration save' switch underneath the load receptor and within external basework casing. This may be achieved by use of a small metal plate with a casing securing screw and destructible adhesive labels over the access hole to the 'calibration save' switch and the securing screw as shown in Figure 7b.

7.3 Software

The legally relevant software versions are designated

Title software	E6227x (where x represents non-legally relevant changes)
Main application	E6226x (where x represents non-legally relevant changes)
Scale driver	E6201A
Scale Updater	E6200

The scale embedded software version is designated J0776J and is protected by a checksum number 6177.

The instructions for accessing the software versions and numbers are as follows (starting from normal weighing mode):

Press the  Return button. The "Menu' screen is displayed.

Press the  ADJUST button. The  FIRMWARE DETAILS button is displayed.

Press the  FIRMWARE DETAILS button. The software versions and numbers are displayed as shown in Figure 4b.

8. Description of Variant 7 approved on 13/04/26

The pattern and variants may be connected in a network with compatible approved Ishida instruments, to share common PLU data, for totalisation across instruments ('floating system'), 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 1: 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.

Note 2: The use of a totalisation across instruments ('floating system') arrangement in this variant is not approved for use in self-service arrangement.

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*.

For multi-interval 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.

Tests

Ensure that instruments are only being used within the special temperature limits stated elsewhere in this Technical Schedule.

FIGURE 6/4D/409 – 1

Ishida Model UNI-8 B Weighing Instrument (Pattern)

FIGURE 6/4D/409 – 2

Ishida Model UNI-8 P Weighing Instrument (Variant 3)

FIGURE 6/4D/409 – 3

Ishida Model UNI-8 EV Weighing Instrument (Variant 4)

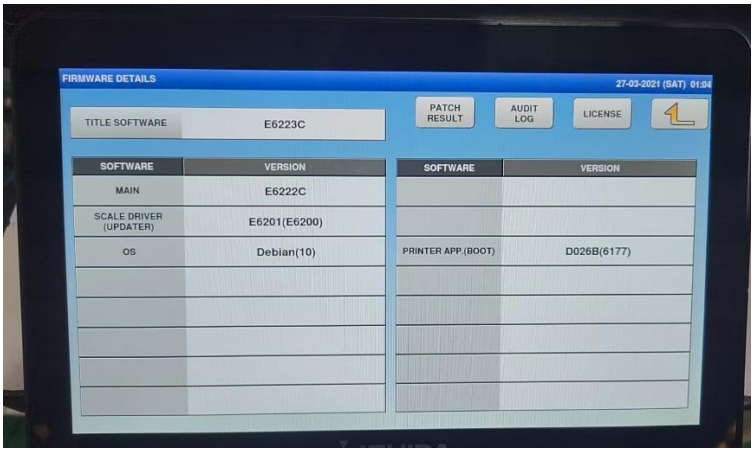
FIGURE 6/4D/409– 4

Ishida Model UNI-8 SS Weighing Instrument (Variant 5)

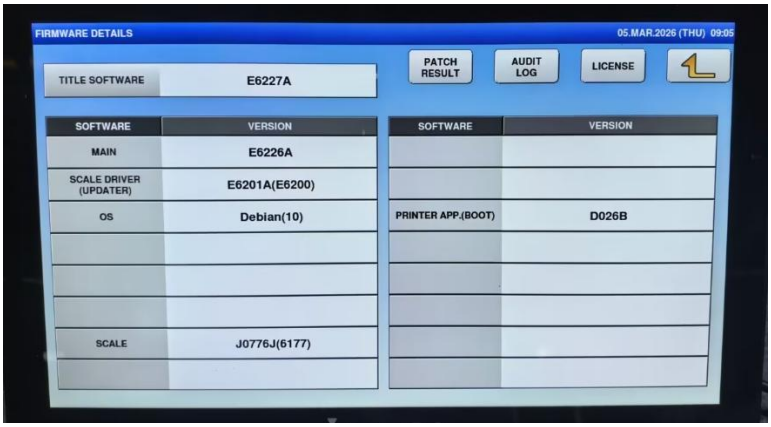
FIGURE 6/4D/409– 5

Ishida Model UNI-8 RP Weighing Instrument (Variant 6)

FIGURE 6/4D/409– 6

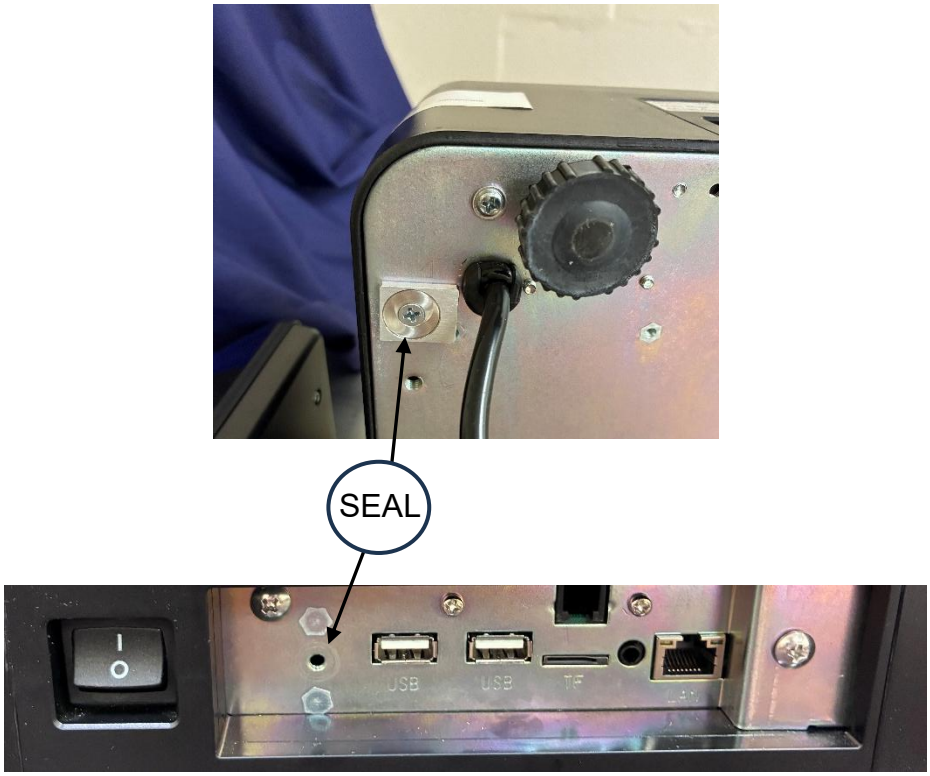


(a) Ishida Model UNI-8 Software Versions

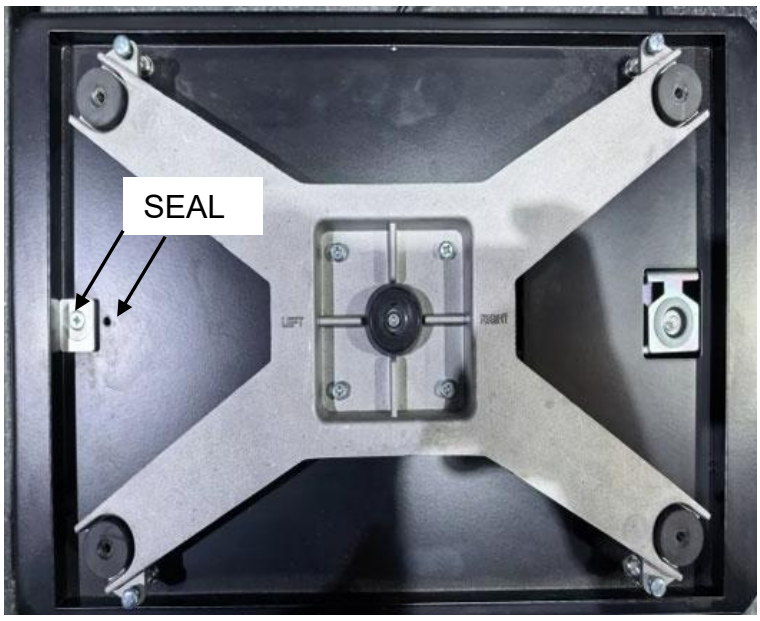


(b) Ishida Model UNI-8 RP Software Versions

FIGURE 6/4D/409– 7



(a) Sealing Method UNI-8 Weighing Instruments (Pattern & Variants 3, 4, 5)



(b) Sealing Method of UNI-8 RP External Basework

Typical Sealing Method

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