Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval
NMI 6/4D/388

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.

Shanghai Teraoka DIGI RM-5800 Weighing Instrument

submitted by Austech Weighing (AUST) Pty Ltd
141-143 Williams Road
Dandenong
VIC 3175

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 becomes subject to review on 1/10/22, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 10 approved – certificate issued	15/09/17

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number ‘NMI 6/4D/388’ 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 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

TECHNICAL SCHEDULE No 6/4D/388

1. Description of Pattern approved on 15/09/17

An Shanghai Teraoka model DIGI RM-5800 class (III) non-automatic self-indicating, price-computing, multi-interval weighing instrument (Figure 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.

Instruments are fitted with a column-mounted TFT colour touchscreen operator display/keyboard and a column-mounted 7 inch TFT colour customer display. The operator touchscreen consists of displays for presentation of tare, weight, unit price and price information, zero, 'net' indicators and functions relating to product look up (PLU) items.

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

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

Instruments may be fitted with output sockets (output interfacing capability) for the connection of auxiliary and/or peripheral devices; this may include wireless networking capabilities.

Instruments are fitted with a 376 mm x 287 mm platform.

The instrument operates from mains AC power (240 V AC, 50 Hz).

(#) 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, or keyboard-entered pre-set tare device 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 is provided for both pre-set tare and semi-automatic tare.

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 Descriptive Markings and Notices

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	Shanghai Teraoka Electronic Co. Ltd

Name or mark of manufacturer's agent	Austech Weighing (AUST) Pty Ltd
Indication of accuracy class	(III)
Pattern approval number for the instrument	NMI 6/4D/388
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*.

1.5 Verification Provision

Provision is made for the application of a verification mark.

1.6 Sealing Provision

Provision is made for the configuration parameters and calibration adjustments to be sealed by means of a destructible adhesive label or sealing screw placed over the service mode switch access hole on the instrument, as shown in Figure 3. An access hole to the service mode switch underneath the instrument.

1.7 Software

The software for the instruments is segregated into legally relevant and non-legally relevant modules. Legally relevant software parts include:

- Libscale.jar (version 1.1.0. release_AUS:26).
- Libprice.jar (version 1.1.0. release build 5).

2. Description of Variant 1 **approved on 15/09/17**

Certain other capacities of the DIGI RM-5800 instruments as listed in Table 1:

Table 1

Maximum Capacity (*Max*)	Minimum Capacity (*Min*)	Verification Scale Interval (e)	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	14.995 kg

Note: The Bold text indicates the specification of pattern.

3. Description of Variant 2 **approved on 15/09/17**

The DIGI RM-5800+ (Figure 2a) instruments are similar to the pattern and variant 1, except the instruments have the 12.1 TFT inch customer displays to replace the 7 inch customer displays.

4. Description of Variant 3 approved on 15/09/17

The DIGI RM-5800EL (Figure 2b) instruments are similar to the pattern and variant 1, except the instruments have the Elexy customer displays to replace the 7 inch customer displays.

5. Description of Variant 4 approved on 15/09/17

The DIGI RM-5800B and DIGI RM-5800LLB (Figure 2c) instruments are similar to the pattern and variant 1, except the following differences.

a) The 7 inch customer displays are integrated in the main instrument body.

b) The operator displays are attached directly to the main instrument body.

c) The instruments do not have a receipt printer.

d) The DIGI RM-5800B instruments have a liner label printer, and the DIGI RM-5800LLB instruments have a lineless label printer.

6. Description of Variant 5 approved on 15/09/17

The DIGI RM-5800P and RM-5800LLP (Figure 2d) instruments are similar to the pattern and variant 1, except the following differences.

a) The instruments do not have a receipt printer.

b) The DIGI RM-5800P instruments have a liner label printers, and the DIGI RM-5800LLP instruments have a lineless label printers.

7. Description of Variant 6 approved on 15/09/17

The DIGI RM-5800EV-B & RM-5800LLEV-B (Figure 2e) instruments are similar to the pattern and variant 1, except the following differences.

a) The instruments do not have a receipt printer.

b) The DIGI RM-5800EV-B instruments have a liner label printers, and the DIGI RM-5800LLEV-B instruments have a lineless label printers.

8. Description of Variant 7 approved on 15/09/17

The DIGI RM-5800EV and RM-5800LLEV (Figure 2f) instruments are similar to the pattern and variant 1, except the DIGI RM-5800EV instruments have a liner label printer, and the DIGI RM-5800LLEV instruments have a lineless label printer.

9. Description of Variant 8 approved on 15/09/17

The DIGI RM-5800EV+ and RM-5800LLEV+ (Figure 2g) instruments are similar to the pattern and variant 1, except the following differences.

a) The instruments have the 12 inch TFT customer displays to replace the 7 inch customer displays.

b) The DIGI RM-5800EV+ instruments have a liner label printer, and the DIGI RM-5800LLEV+ instruments have a lineless label printer.

10. Description of Variant 9 approved on 15/09/17

The DIGI RM-5800EV-EL and RM-5800LLEV-EL (Figure 2h) instruments are similar to the pattern and variant 1, except the following differences.

a) The instruments have the Elexy customer displays to replace the 7 inch TFT customer displays.
b) The DIGI RM-5800EV-EL instruments have a liner label printer, and the DIGI RM-5800LLEV-EL instruments have a lineless label printer.

11. Description of Variant 10 approved on 15/09/17

The DIGI RM-5800EV+B and DIGI RM-5800LLEV+B (Figure 2i) instruments are similar to the pattern and variant 1, except the following differences.

a) The instruments have the 12 inch TFT customer displays to replace the 7 inch customer displays.
b) The instruments do not have a receipt printer.
c) The DIGI RM-5800EV+B instruments have a liner label printer, and the DIGI RM-5800LLEV+B instruments have a lineless label printer.

TEST PROCEDURE

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

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

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/388 – 1

Shanghai Teraoka Model DIGI RM-5800 Weighing Instrument (Pattern)

FIGURE 6/4D/388 – 2

2a - Shanghai Teraoka Model DIGI RM-5800+ Weighing Instrument (variant 2)

2b - Shanghai Teraoka Model DIGI RM-5800EL Weighing Instrument (variant 3)

DIGI RM-5800LLB

DIGI RM-5800B

2c - Shanghai Teraoka Model DIGI RM-5800B & RM-5800LLB Weighing Instruments (variant 4)

DIGI RM-5800P

DIGI RM-5800LLP

2d - Shanghai Teraoka Model DIGI RM-5800P & RM-5800LLP Weighing Instruments (variant 5)

DIGI RM-5800LLEV-B

DIGI RM-5800EV-B

2e - Shanghai Teraoka Model DIGI RM-5800EV-B & RM-5800LLEV-B Weighing Instruments (variant 6)

DIGI RM-5800LLEV

DIGIRM-5800EV

2f - Shanghai Teraoka Model DIGI RM-5800EV & RM-5800LLEV Weighing Instruments (variant 7)

DIGI RM-5800LLEV+

DIGI RM-5800EV+

2g - Shanghai Teraoka Model DIGI RM-5800EV+ & RM-5800LLEV+ Weighing Instruments (variant 8)

DIGI RM-5800LLEV-EL

DIGI RM-5800EV-EL

2h - Shanghai Teraoka Model DIGI RM-5800EV-EL & RM-5800LLEV-EL Weighing Instruments (variant 9)

DIGI RM-5800LLEV+B

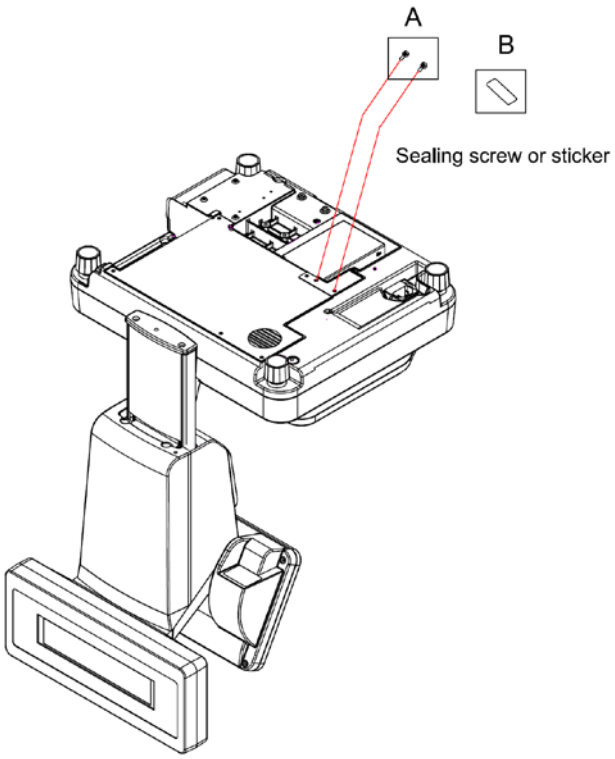
DIGI RM-5800EV+B

2i - Shanghai Teraoka Model DIGI RM-5800EV+B & RM-5800LLEV+B Weighing Instruments (variant 10)

FIGURE 6/4D/388 – 3

RM-5800&RM-5800+
RM-5800EL(V1)

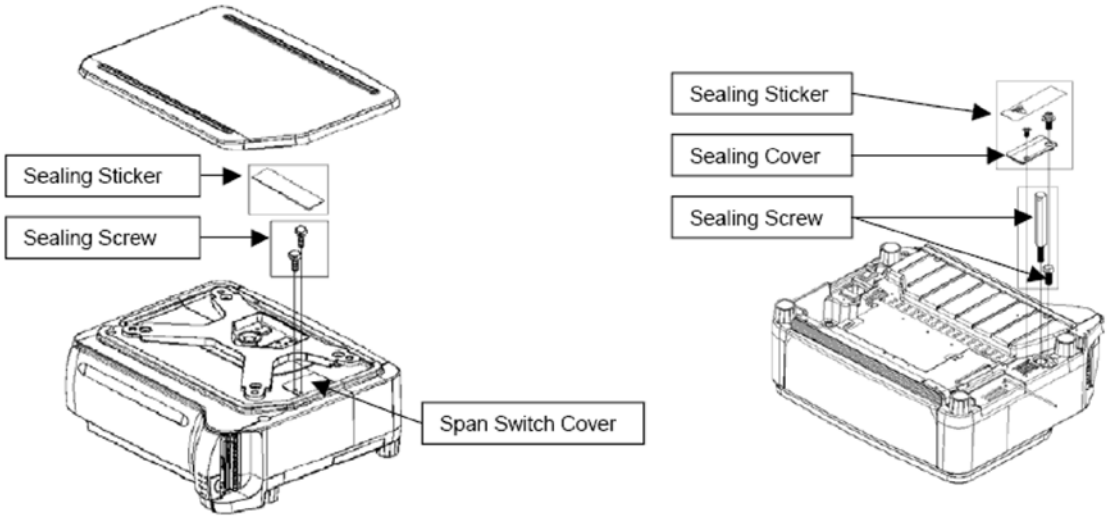
Sealing position



RM-5800EV EL/ RM-5800EV PLUS/ RM-5800EV/ RM-5800B PROMO
RM-5800B(V1)/ RM-5800P(V1)/ RM-5800EV(V1)/ RM-5800EV+(V1)/ RM-5800EV+B(V1) /RM-5800EV-B(V1)/ RM-5800EVEL(V1)/ RM-5800BS(V1)

RM-5800LL B(V1)/ RM-5800LL P(V1)/ RM-5800LL EV(V1)/ RM-5800LL EV+(V1)/ RM-5800LL EV+B(V1) /RM-5800LL EV-B(V1)/ RM-5800LL EVEL(V1)/ RM-5800LL BS(V1)

Sealing Position



Typical Sealing

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