

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/4D/360

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.

Teraoka Model DIGI RM-60 Weighing Instrument

submitted by W W Wedderburn Pty Ltd 101 Williamson Road Ingleburn NSW 2565

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 July 2004.

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

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	15/09/11
1	Pattern & variants 1 to 3 reviewed – certificate issued	6/12/16

DOCUMENT HISTORY

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/360' 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 Certificates No S1/0/A or No S1/0B.

Special

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

Mario Zamora

TECHNICAL SCHEDULE No 6/4D/360

1. Description of Pattern

approved on 15/09/11

A Teraoka model DIGI RM-60 class non-automatic self-indicating pricecomputing multi-interval weighing instrument 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 may also be known as model DIGI RM-64.

Instruments are fitted with a double-sided column-mounted monochrome LCD type display. For each side, the display consists of a large display for presentation of tare, weight, unit price and price information, zero and net indicators, and a lower small display capable of displaying alphanumeric information relating to product look up (PLU).

Instruments are fitted with an integral printer, for printing of receipts.

Instruments have unit price to \$999.99/kg, price to \$9999.99, and have a product look up (PLU) facility.

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

The instrument operates from mains AC power (240 V AC, 50 Hz) or a rechargeable battery supply of 12 V DC.

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 automatic and semi-automatic zero-setting devices 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 non-automatic keyboard-entered pre-set subtractive tare device, each of up to 5.998 kg maximum tare 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 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

The instrument is provided with adjustable feet.

1.5 Networking

Instruments may be connected in a network with compatible approved Teraoka instruments, to share common PLU data, for totalisation across instruments ('floating system'), and to accumulate and retrieve management information.

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

Instruments carry the following markings:

Manufacturer's mark, or name written in full Name or mark of manufacturer's agent	Teraoka WEDDERBURN	
Indication of accuracy class	\blacksquare	
Pattern approval mark for the instrument	NMI 6/4D/360	
Maximum capacity	<i>Max</i> g or kg	#1
Minimum capacity	<i>Min</i> g or kg	#1
Verification scale interval	<i>e</i> = g or kg	#1
Maximum subtractive tare	<i>T</i> = g or kg	#2
Serial number of the instrument		

- #1 These markings are also shown near the display of the result if they are not already located there.
- #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	<i>Max</i> / g or kg
Verification scale interval	e = g or kg

1.7 Verification Provision

Provision is made for the application of a verification mark.

1.8 Sealing Provision

Provision is made for the calibration adjustments and configuration parameters to be sealed by means of lead and wire type seals with drilled screws, or a destructible label placed across the join between the instrument housing and the base cover plate and over an access hole to the span switch in the cover plate.

Typical sealing arrangements are shown in Figure 2.

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2. Description of Variant 1

The pattern or variants as multi-interval instruments of certain other capacities as listed in Table 1 below (the pattern is shown in **bold**).

Maximum Capacity	Verification Scale Interval	Maximum Subtractive
(Max1/Max2)	(e1/e2)	Tare Capacity $(T =)$
3 / 6 kg	1 / 2 g	2.999 kg
6 / 15 kg	2 / 5 g	5.998 kg
15 / 30 kg	5 / 10 g	9.995 kg

TABLE 1

3. Description of Variant 2

The pattern or variants as single interval instruments of certain capacities as listed in Table 2 below. A semi-automatic subtractive tare device, and/or a keyboardentered pre-set subtractive tare device, each of up to the maximum tare capacity shown in the table, may be fitted.

Maximum Capacity (Max)	Verification Scale Interval (e)	Maximum Subtractive Tare Capacity ($T =$)
6 kg	1 g	2.999 kg
6 kg	2 g	2.998 kg
12 kg	2 g	5.998 kg
15 kg	5 g	7.495 kg
30 kg	5 g	9.995 kg
30 kg	10 g	14.99 kg

TABLE 2

4. Description of Variant 3

The pattern and variants may be fitted with an alternative indicator which does not have a lower alphanumeric display on the customer side (Figure 3).

TEST PROCEDURE No 6/4D/360

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*.

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/360-1



Teraoka Model DIGI RM-60 Weighing Instrument (Operator Side)



Teraoka Model DIGI RM-60 Weighing Instrument (Customer Side)

FIGURE 6/4D/360 - 2



(A) Sealing Using Lead and Wire and Drilled Screws

(B) Sealing Using a Destructible Adhesive Label Note: The label must cover the hole in the base cover plateas well as the join

Typical Sealing Methods

FIGURE 6/4D/360 - 3



Teraoka Model RM-60 Weighing Instrument With Alternative Customer Display

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