Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval

NMI 6/4D/364

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 DIGI Model DPS-5000 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 **1/12/22**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – certificate issued	3/11/11
1	Pattern & variants 1 to 3 amended & **reviewed,** variant 4 approved – certificate issued	12/07/17

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI 6/4D/364' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI 6/4D/364' in addition to the approval number of the instrument, 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 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*.

Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4D/364

1. Description of Pattern approved on 3/11/11

A Teraoka DIGI model DPS-5000 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 may also be known as model DIGI DPS-5000.

Instruments are fitted with a TFT SVGA touchscreen with backlit display. The operator display panel is able to rotate left/right and in up/down direction. A direct thermal printer for label printing is integrated in the housing.

Instruments have unit price to $9999.99/kg, price to $9999.99, and 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.

Instruments may be fitted with data ports for wired and wireless interfaces for the connection of auxiliary and/or peripheral devices.

Instruments use a Teraoka SX-C series basework, with a platform size of 350 × 300 mm, and are fitted with a Teraoka K series load cell.

The instrument operates from mains AC power (220-240 V AC, 50/60 Hz).

1.1 Zero

The initial zero-setting device 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 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. The display check of the operator display is carried out whenever a weigh item PLU has been selected and then the ZERO button is pressed.

1.4 Levelling

The instrument has adjustable feet and a level indicator.

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

1.5 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Teraoka	
Name or mark of manufacturer's agent	WEDDERBURN	
Indication of accuracy class	(III)	
Pattern approval mark for the instrument	NMI 6/4D/364	
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 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*.

Instruments are marked 'NOT FOR TRADING DIRECT WITH THE PUBLIC' (or similar wording).

1.6 Verification Provision

Provision is made for the application of a verification mark.

1.7 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of destructible adhesive labels placed over the access to the calibration switch on the display/printer body (Figure 2).

2. Description of Variant 1 **approved on 3/11/11**

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

TABLE 1– Multi-interval Instruments

Maximum Capacity (Max_1 / Max_2)	Verification Scale Interval (e_1 /e_2)	Maximum Subtractive 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	14.995 kg
30 / 60 kg	10 / 20 g	29.99 kg

3. Description of Variant 2 **approved on 3/11/11**

The pattern or variants as single interval instruments of certain capacities as listed in Table 2 below.

TABLE 2 – Single Interval Instruments

Maximum Capacity (Max)	Verification Scale Interval (e)	Maximum Subtractive Tare Capacity (T = - …)
3 kg	1 g	2.999 kg
6 kg	1 g	5.999 kg
6 kg	2 g	5.998 kg
12 kg	2 g	11.998 kg
15 kg	2 g	14.998 kg
15 kg	5 g	14.995 kg
30 kg	5 g	29.995 kg
30 kg	10 g	29.99 kg
60 kg	10 g	59.99 kg
60 kg	20 g	59.98 kg

4. Description of Variant 3 approved on 3/11/11

The pattern and variants with alternative baseworks. The approved baseworks are shown in the Tables 3 (a & b) and 4 below.

TABLE 3a – Single Interval Baseworks

Make	Teraoka						
Basework model	S-YA			S-YB			
Platform size, mm	380 × 380			480 × 480			
Max, kg	30	60	150	30	60	150	300
e, kg	0.01	0.02	0.05	0.01	0.02	0.05	0.1
T, kg	29.99	59.98	149.95	29.99	59.98	149.95	299.9
Load cell make	Teraoka						
Load cell model	P			PM			
Load cell *Emax*, kg	45	90	225	45	90	225	450
No of load cell	1			1			
Load cell sensitivity at *Emax*	1.5 mV/V			1.5 mV/V			
Input impedance	1100 Ω			1100 Ω			
Excitation voltage (maximum)	20 V DC			20 V DC			
Cable length (±0.1m) (#)	3 m			3 m			
No of leads (plus shield)	4			4			

TABLE 3b – Additional single Interval Baseworks

Make	Teraoka					
Basework model	S-YC					
Platform size, mm	341 × 284					
Max, kg	6		15		30	
e, kg	0.001	0.002	0.002	0.005	0.005	0.010
T, kg	5.999	5.998	14.998	14.995	29.995	29.99
Load cell make	Teraoka					
Load cell model	K type					
Load cell *Emax*, kg	9		22.5		45	
No of load cell	1					
Load cell sensitivity at *Emax*	1.5 mV/V					
Input impedance	350 Ω					
Excitation voltage (maximum)	20 V DC					
Cable length (±0.1m) (#)	3 m					
No of leads (plus shield)	4					

Max = maximum capacity of the instrument
e = verification scale interval
T = maximum subtractive tare capacity (*T* = - …)

(#) The load cell cable length supplied with the basework shall not be shortened.

TABLE 4 – Multi-interval Baseworks

Make	Teraoka			
Basework model	S-YC			
Platform size, mm	341 × 284 (for S-YC)			
Max, kg	3/6	6/15	15/30	30/60
e, kg	0.001/0.002	0.002/0.005	0.005/0.010	0.010/0.020
T, kg	2.999	5.998	14.995	29.99
Load cell make	Teraoka			
Load cell model	K type			
Load cell *Emax*, kg	9	22.5	45	90
No of load cell	1			
Load cell sensitivity at *Emax*	1.5 mV/V			
Input impedance	430 Ω			
Excitation voltage (maximum)	20 V DC			
Cable length (±0.1m) (#)	3 m			
No of leads (plus shield)	4			

Max = maximum capacity of the basework

e = verification scale interval

T = maximum subtractive tare capacity (*T* = - …)

(#) The load cell cable length supplied with the basework shall not be shortened.

5. Description of Variant 4 approved on 12/07/17

The Digi model DPS-5000e instrument which is similar to the pattern and variants 1 to 3 but with an alternative I/O board and base board.

5.1 Software

The legally relevant software is identified by scale driver version number 7.1.1.18 and checksum number 4C78A1C8.

The instructions for accessing the legally relevant version are as follows (starting from the normal weighing mode):

- Press the ‘MENU” key, then the ‘MAINTENANCE’ key, and then the ‘SYSTEM INFO’ key.
- The system information is displayed**.**

TEST PROCEDURE No 6/4D/364

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.

FIGURE 6/4D/364 – 1

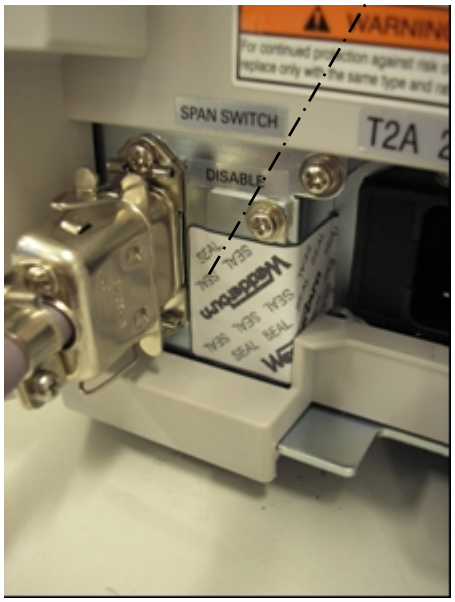
(b) With rear cover fitted

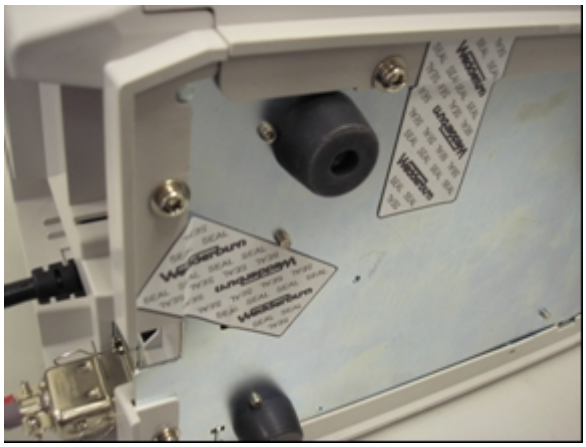
(c) Without rear cover fitted

Teraoka DIGI Model DPS-5000 Weighing Instrument (The pattern)

FIGURE 6/4D/364 – 2

(under)





Showing destructible adhesive label seal over switch cover plate to prevent access to SPAN switch.

Underneath view showing destructible adhesive label seals over join of rear and side covers to prevent internal access

Typical Sealing of the Calibration Access

~ End of Document ~