

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

# Certificate of Approval NMI 6/4D/380

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 DPS-800s 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 October 2015.

This approval becomes subject to review on 1/01/21, and then every 5 years thereafter.

## DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 & 2 approved – certificate issued	10/12/15

## CONDITIONS OF APPROVAL

## General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/380' 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

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*.

**Dr A Rawlinson** 

#### TECHNICAL SCHEDULE No 6/4D/380

#### 1. Description of Pattern

#### approved on 10/12/15

A Teraoka model Digi DPS-800s class self-indicating multi-interval price computing labelling weighing instrument (Figure 1) with a verification scale interval of 0.002 kg up to 6 kg and 0.005 kg above 6 kg to 15 kg.

The instrument is fitted with a touch screen display. The instrument is in a 'modular' form where the indicator/controller and printer are mounted separately on a frame above the scale basework. Modules are connected to the indicator/controller by cables. The pattern may also be known as a DIGI DPS-800.

The instrument has a TFT LCD touch screen display mounted in stainless steel housing.

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

The instrument has the ability to calculate price totals and then print labels for weighed loads, non-weigh items.

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

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

#### 1.1 Basework

The Teraoka model S-WQ basework has the load receptor directly supported by a single load cell. The load receptor has a nominal dimension of 346 mm × 286 mm.

## 1.2 Load Cell

A Teraoka model PN15KG load cell of 22.5 kg maximum capacity is used.

#### 1.3 Indicator

A Teraoka model DPS-800s digital indicator is used. The indicator is also described in the documentation of approval NMI S706.

The indicator may be mounted on a variety of frames, e.g. Figures 1 and 2.

#### 1.4 Zero

A zero-tracking device may be fitted.

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.

#### 1.5 Tare

A semi-automatic subtractive taring device and/or a pre-set tare device, each of up to 50% of the maximum capacity of the instrument, may be fitted.

# 1.6 Levelling

The base work is provided with adjustable feet and adjacent to the level indicator is a notice advising that 'Instrument must be level when in use' (or similar wording).

## 1.7 Additional Features

The additional functions (other than the indications of measured mass, i.e. gross, tare net displayed either on the indicator or an auxiliary or peripheral device) are not approved for trade use.

## **1.8 Verification Provision**

Provision is made for the application of a verification mark.

## 1.9 Sealing Provision

The A/D unit is fitted within the controller module (Figure 3).

Provision is made for sealing of the A/D unit SPAN switch cover by use of destructible adhesive labels over the screws of the A/D unit which join the SPAN cover to the A/D unit.

The position of the SPAN switch can be checked on the display by entering the Service Menu and selecting the scale option. If the scale option is selected without switching over the SPAN switch, then the 'Error - Security switch' error message will be shown. If this error message is displayed then the SPAN protection has been enabled. Note to enter Service Menu a password is required.

## **1.10 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 Name or mark of manufacturer's agent	 
Indication of accuracy class	₩.
Pattern approval number for the instrument	NMI 6/4D/380
Maximum capacity	<i>Max</i> / g or kg #1
Minimum capacity	<i>Min</i> g or kg #1
Verification scale interval	e =/ 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 when *T* is not equal to *Max*.

In addition, instruments shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

## 2. Description of Variant 1

## approved on 10/12/15

A Teraoka model Digi DPS-800s multi-interval instrument with a verification scale interval of 0.005 kg up to 15 kg and 0.010 kg above 15 kg to 30 kg.

A Teraoka model PN30KG load cell of 45 kg maximum capacity is used.

## 3. Description of Variant 2

#### approved on 10/12/15

The Teraoka model Digi DPS-800s as single interval instruments of certain capacities as listed in Table 1 below:

A Teraoka PN series load cell is used.

Maximum Capacity	Verification Scale Interval	Maximum Tare Capacity (T =)	Load Cell Model	Load Cell Capacity
6 kg (#)	2 g	3 kg	PN6KG	9 kg
15 kg	5 g	7.5 kg	PN15KG	22.5 kg
30 kg	5 g	15 kg	PN30KG	45 kg
30 kg	10 g	15 kg	PN30KG	45 kg

 Table 1 – Single interval instrument capacities

# 3.1 Markings

Instruments should be marked as per clause **1.10 Descriptive Markings and Notices** except that for single interval instruments there is only one range therefore only one value of maximum capacity and verification scale interval to be marked.

(#) In addition, the 6 kg instrument (with a model PN6KG 9 kg load cell) has special temperature limits of 0°C to +40°C and this is marked on the basework nameplate and repeated on the indicator.

# 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 the *National Trade Measurement Regulations 2009*.

## Tests

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.

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

# FIGURE 6/4D/380 - 1



Teraoka Model Digi DPS -800s (indicator and printer mounted on frame)



FIGURE 6/4D/380-2

Teraoka Model Digi DPS -800s Digital Indicator

# FIGURE 6/4D/380-3



Location of A/D Unit Within the Indicator Housing (A/D Unit to be Sealed)

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