



Australian Government
Department of Industry,
Innovation and Science

National Measurement Institute

Supplementary Certificate of Approval

NMI S759

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.

Opal POS

submitted by Technohost Pty Ltd
33 Heights Drive
Robina QLD 4226

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 M 7, *Pattern Approval Specifications for Point of Sale Systems*, dated June 2012.

This approval becomes subject to review on 1/04/23, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – certificate issued	1/03/18

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S759' and only by persons authorised by the submitter.

It is the submitter'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.

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*.



Darryl Hines

TECHNICAL SCHEDULE No S759

1. Description of Pattern

approved on 1/03/18

A Technohost model Opal POS system to provide certain additional facilities for transactions when interfaced to compatible (#) NMI-approved measuring instruments granted with reference to document NMI M7.

1.1 Key Features

- The system provides point of sale arrangements for a Teraoka model DS-983C self-indicating non-automatic weighing instrument (approval NMI 6/4C/303) or other compatible (#) NMI-approved measuring instruments.
 - The system receives measurement data from the output interface of the approved measuring instrument and computes prices using a product look up (PLU) facility.
 - The system computes total price for multiple items including non-measured items and is approved for use for transactions direct to the public.
 - Manually entered measurement data shall be indicated as such on a printed transaction record.
 - The system is able to apply a preset tare value up to the maximum capacity of the approved measuring instrument. Preset tare values may be keyboard-entered or stored (e.g. within a PLU facility).
 - The POS controllers may be connected in a network to share common PLU data, for totalisation, and to accumulate and retrieve management information.
- (#) 'Compatible' is defined to mean that no additions/changes to the hardware/software specified in this approval are required for satisfactory operation of the system.

1.2 System Description

The Opal point of sale (POS) system (Figure 1) comprises:

(i) POS Controller

The Technohost model Opal POS controller comprises a Intel NUC model NUC5PGYH or equivalent (*) PC-based device that operates a Microsoft Windows-based operating system running Opal software version 2.0.4.xx where "xx" represents non metrology relevant part of software. The software version number is displayed by pressing the 'AltS – Setup' icon on the main screen as shown in Figure 2.

(ii) Electronic Indications

Indications shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

A Eyoyo model 15" LCD computer monitor or equivalent (*) is connected to the POS controller to provide an indication for the operator (Figure 3).

An AOC model E1659F computer monitor or equivalent (*) as an optional customer display may be connected to the controller for providing an indication for the customer (Figure 4).

Information additional to that required by document NMI M7, including totalisation details and product images, may also be indicated.

(iii) Printing Devices

Transaction records shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

An EPSON model M249A printer or equivalent (*) is connected to provide a transaction record printing facility. A typical record is shown in Figure 5.

- (*) 'Equivalent' is defined to mean other proprietary equipment of the same or better specifications requiring no changes to the software specified in this approval for satisfactory operation of the system.

(iv) Additional System Facilities

In addition, the system may include other facilities including point of sale cash drawers, magnetic card and/or barcode reader and electronic funds transfer (EFT), etc. The facilities shall not interact with the system in a way that would cause an incorrect indication of the measured quantity or price.

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Descriptive Markings

The POS controller is marked in a clear and permanent manner, in one location, with the following information:

Submittor's name or mark	Technohost Pty Ltd
Serial number or other unique identifier
Pattern approval number	NMI S759

TEST PROCEDURE No S759

The POS system shall be tested in addition to any tests specified in the approval documentation for the measuring instrument/s to which the POS system is connected, as appropriate.

The POS system shall be tested in the normal operational mode of the instrument and device, not in 'training mode' or any other management mode.

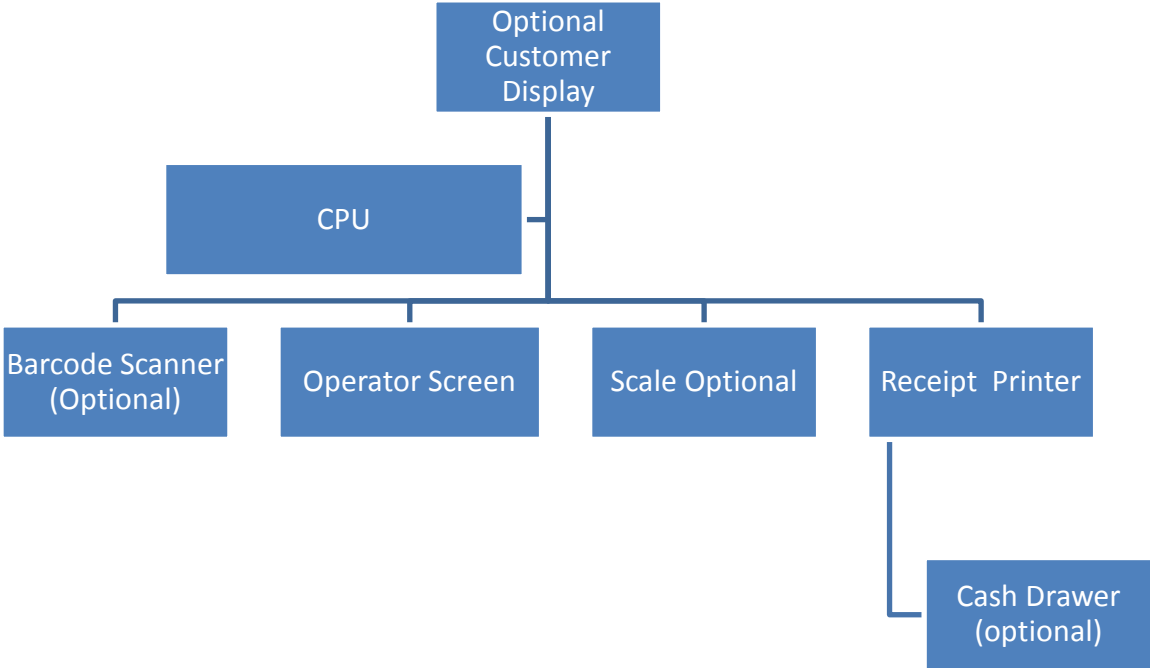
Maximum Permissible Error

The maximum permissible error for price computation is ± 0.5 cent.

TESTS

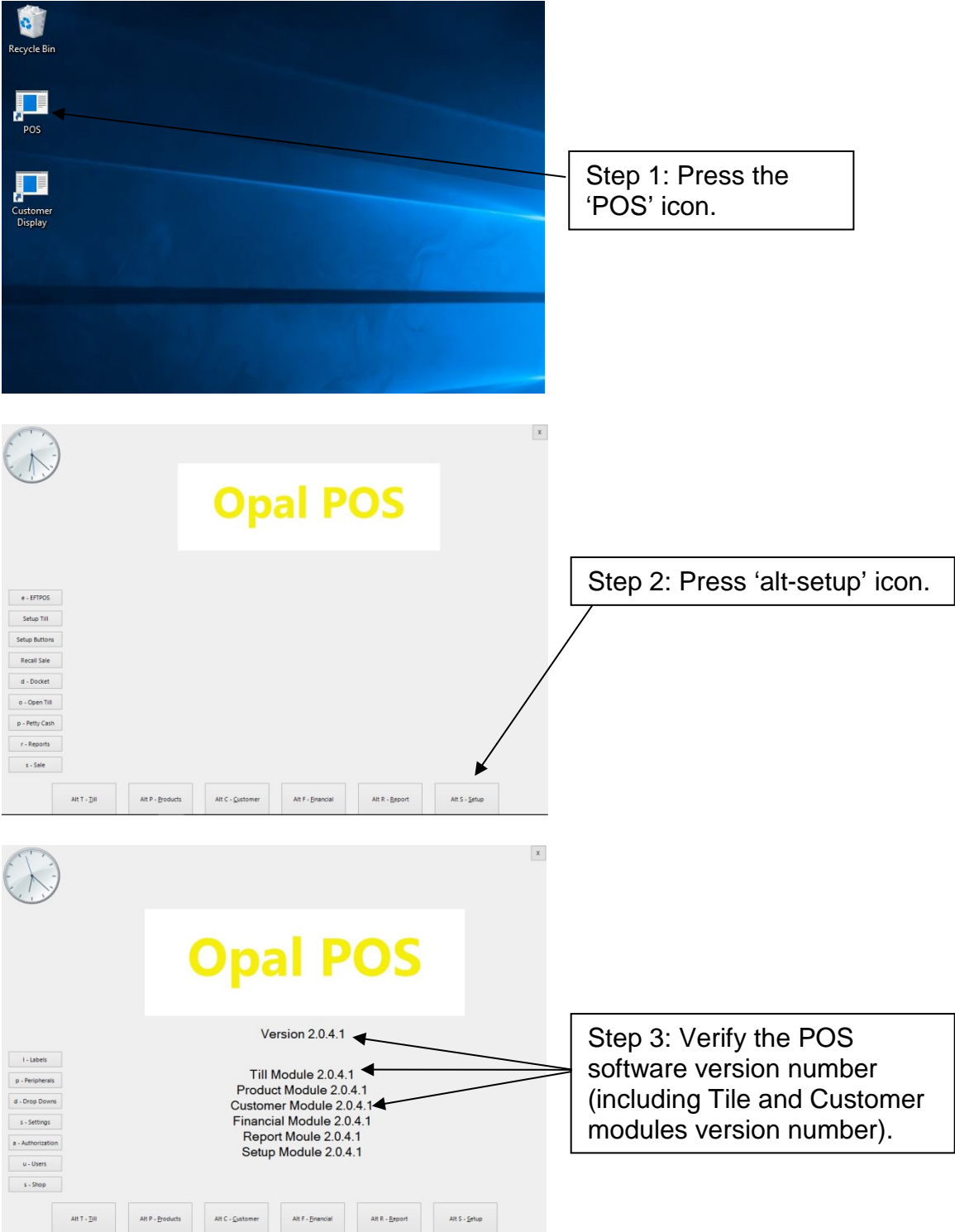
1. Check the software version number/s.
2. Check that the POS system faithfully reproduces the measurement data in the same units and scale interval as the connected approved measuring instrument, e.g. test by using a PLU without a stored tare.
3. Check that the system performs correct price computation, and computes and indicates a correct unrounded subtotal. For cash payment methods, check that any rounding calculation is correct.
4. Perform a measurement with a preset tare applied and confirm that the POS system correctly calculates and indicates a net measurement result.
5. Manually enter some pre-determined measurement data and ensure that the printed transaction record clearly indicates the transaction as such.
6. Ensure that electronic indications and printed information are in accordance with document NMI M7.

FIGURE S759 – 1



Point of Sale (POS) System

FIGURE S759 – 2



Method of accessing the POS software version

FIGURE S759 – 3

Staff: Nav Bhartia Client:

Detail	Total
Avocado Large	\$7.50
=> 1.000 pc(s) @ \$7.50/pc(s)	
Coffee Latte Small	\$16.00
=> 4.000 pc(s) @ \$4.00/pc(s)	
Apple Granny Smith SCALES	\$17.15
=> 2.365 kg @ \$7.25/kg	
Pre Tare	\$0.84
=> 0.285 kg NET @ \$2.95/kg	
Apple Granny Smith SCALES	\$10.88
-> Manual Qty:	
-> 1.500 kg @ \$7.25/kg	

Points

NMI	F5 - Hold Sale	F8 - Refund Selected	F3 - Lookup	F9 - Edit Price
D - Discount Sale	F6 - Give Credit	F7 - Gift Voucher Sale	Cancel Sale	F11 - Edit Qty

Pay Now Client Del Item

Avocado Coffee Latte Apple Pre Tare

\$52.37
Redeem Points \$ 0.00
Total \$52.37

Typical Operator Display

FIGURE S759 – 4

Avocado Large	\$7.50
=> 1.000 pc(s) @ \$7.50/pc(s)	
Coffee Latte Small	\$16.00
=> 4.000 pc(s) @ \$4.00/pc(s)	
Apple Granny Smith SCALES	\$17.15
=> 2.365 kg @ \$7.25/kg	
Pre Tare	\$0.84
=> 0.285 kg NET @ \$2.95/kg	
Apple Granny Smith SCALES	\$10.88
-> Qty Manual Entered	
-> 1.500 kg @ \$7.25/kg	
Sub Total	\$52.37
Points Redeem	\$0.00
Balance Due	\$52.37
Points Earned	0

Typical Customer Display

FIGURE S759 – 5

TAX INVOICE

ABC Pty Ltd
33 Heights DR
Robina QLD 4226
Ph: 0755001100
ABN: 12345678910
Sales Assistant: Nav
Cash Sale
Docket # A21022018143427 Register ID: 1
Date: 21/02/2018 14:34:27

Description	\$ Price
Navel Orange	2.99
Coffee	20.00 *
5.000 pc(s) @ \$4.00/pc(s)	
Apple	7.98
2.000 kg @ \$3.99/kg	
Pre Tare	17.00
1.700 kg NET @ \$10.00/kg	
Apple	6.58
Manual Weight	
1.650 kg @ \$3.99/kg	

Subtotal	\$ 54.55
Total (inc GST)	\$ 54.55
Total tendered Cash	\$ 54.55

Total GST	\$ 1.82
Total change	\$ 0.00

* Items with GST

A Typical Receipt

~ End of Document ~