



Australian Government  
Department of Industry and Science

## National Measurement Institute

# Supplementary Certificate of Approval

## NMI S656

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.

AMCCIT Model iZENPOS Point of Sale (POS) System

submitted by   Australis Microcomputer  
                  T/A AMC Convergent IT  
                  Unit 237/416 St Kilda Road  
                  Melbourne   VIC   3004

**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 1/03/21, and then every 5 years thereafter.

### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	7/02/14
1	Pattern amended (validity date) – interim certificate issued	23/04/15
2	Pattern amended (validity date) – interim certificate issued	17/09/15
3	Pattern approved – certificate issued	31/03/16

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S656' and only by persons authorised by the submitter.

Instruments purporting to comply with this approval and currently marked 'NMI PS656' may be re-marked 'NMI S656' but 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*.



**Dr A Rawlinson**

TECHNICAL SCHEDULE No S656

**1. Description of Pattern** **provisionally approved on 7/02/14**  
**approved on 31/03/16**

An AMCCIT model iZENPOS 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 CAS model PD-II self-indicating non-automatic weighing instrument (approval NMI 6/4C/237) 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 AMCCIT model iZENPOS point of sale (POS) system (Figure 1) comprises:

**(i) POS Controller**

The AMCCIT model iZENPOS POS controller comprises a PI B2 or equivalent (\*) ARM CPU-based device (aka 'Raspberry Pi') that operates a Linux-based operating system running iZENPOS version 1.W1.x.xx. The software version number is displayed to the left of the 'Log out' button at the bottom of the operator screen and also at the bottom of the operator login screen.

**(ii) Electronic Indications**

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

An Apple model iPad touch sensitive device or equivalent (\*) is connected to the POS controller via a WiFi modem and provides an indication for the operator (Figure 2).

An Acer model V193HQA computer monitor or equivalent (\*) is connected to the controller and provides an indication for the customer (Figure 3).

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*.

A J2 Retail Systems model BTP2002NP printer or equivalent (\*) is connected to provide a transaction record printing facility. A typical record is shown in Figure 4.

Labels shall satisfy the requirements of document NMI M7.

A BIXOLON model SLP-D420 printer or equivalent (\*) is connected to provide a label printing facility. A typical label 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	.....
Serial number or other unique identifier	.....
Pattern approval number	NMI S656

### TEST PROCEDURE No S656

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

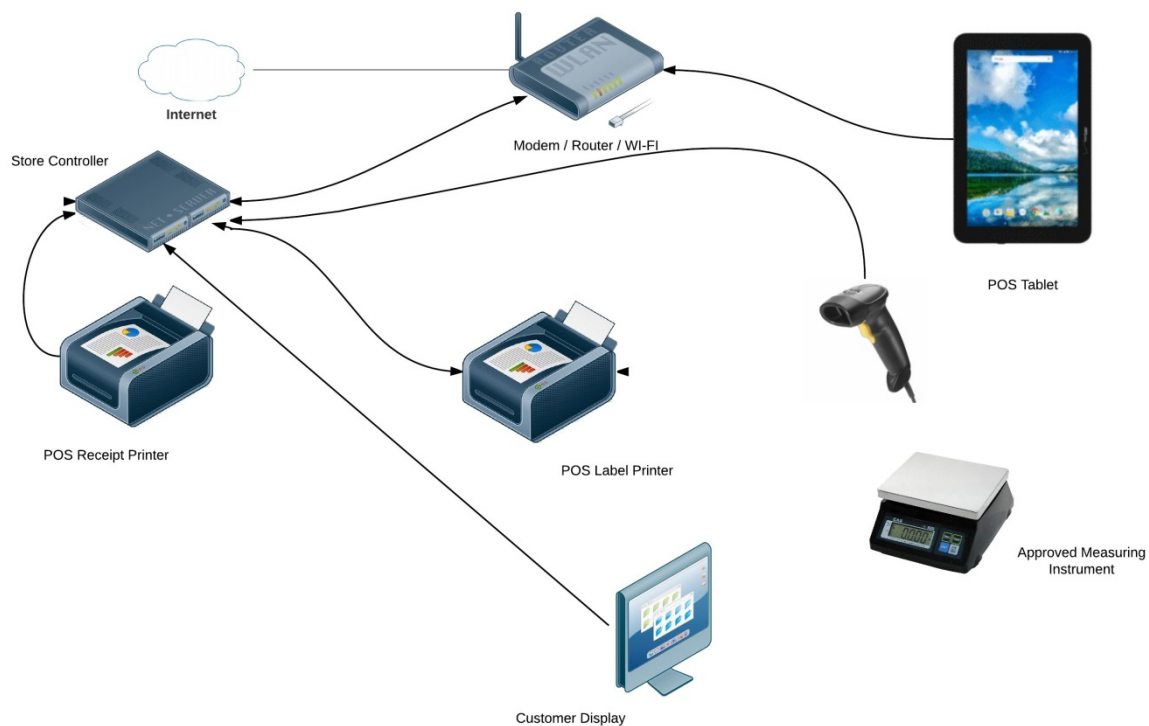
The maximum permissible error for price computation is  $\pm 0.5$  cent.

### TESTS

1. Check the software version number/s via the iPad or Tablet operator display and then use supervisor ID and password to enter the setup menu.
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. For network systems check to ensure that the measurement data printed on the transaction record is correctly reproduced.
7. Ensure that electronic indications and printed information are in accordance with document NMI M7.

FIGURE S656 – 1



AMCCIT Model iZENPOS Point of Sale (POS) System

FIGURE S656 – 2



Typical Operator Display

FIGURE S656 – 3

Hi, my name is Susan	Scale: 0.545kg <small>Stable</small>
<b>Pork Sausages</b>	
0.545kg N x \$9.99/kg	<b>\$5.44</b>
<b>Sale total: \$5.44</b>	

Typical Customer Display

FIGURE S656 – 4

**Test Store**  
Tax Invoice  
ABN 12-55555-88888  
1 This street Preston  
Tel 03 1234567890

Pork Sausages	
0.545 kg NET @ \$9.99/kg	\$5.44
Rounding	\$0.01
-----	
<b>Total</b>	<b>\$5.45</b>
<b>Cash</b>	<b>-\$5.45</b>

**Change Due            \$0.00**

Thank you for shopping at AMC Test Store  
Please retain receipt for returns

OPERATOR:    Supervisor  
LINE ITEMS: 1  
TERMINAL:    2  
JOURNAL:      00094 14-Feb-2016 17:50  
|

A Typical Receipt

FIGURE S585 – 5



A Typical Label

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