

Australian Government

Department of Industry, Science and Resources

National Measurement Institute

36 Bradfield Road, West Lindfield NSW 2070

# Supplementary Certificate of Approval NMI S841

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.

Auresys Technology model neupos Point of Sale (POS) Control System for Fuel Dispensers for Motor Vehicles

submitted by Auresys Australia Pty Ltd ASIC Level 9, 1 William Street Perth WA 6000 Australia

**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 of the pattern has been granted with reference to document NMI R 117-1, Measuring Systems for Liquids Other than Water, June 2011.

The approval of variant 1 has been granted with reference to document NMI M 7, *Pattern Approval Specifications for Point of Sale Systems*, dated June 2012.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

Rev	Reason/Details	Date
0	Pattern & variant 1 & 2 approved – certificate issued	13/03/23

### DOCUMENT HISTORY

#### CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S841' and only by persons authorised by the submittor.

Instruments purporting to comply with this approval and currently marked 'NMI PS841' may be re-marked 'NMI S841' but 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.

### 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** Manager Policy and Regulatory Services

### TECHNICAL SCHEDULE No S841

#### 1. Description of Pattern

#### approved on 13/03/23

An Auresys Technology model neupos point of sale control system to provide an attended self-service facility for compatible (#) approved fuel dispensers for motor vehicles. The fuel dispensers are controlled by the neupos point of sale control system through the Integration Technologies Enabler embedded controller (as described in approval NMI S518).

- The system is approved for environmental class A, a climate-controlled environment between 5°C and 30°C.
- The system can provide a self-serve arrangement for compatible (#) approved fuel dispensers.
- The system allows post-payment or pre-payment deliveries; in the latter case the fuel dispenser must incorporate a pre-set device.
- The system allows only a single delivery per fuel dispenser, i.e. current sale on the fuel dispenser.
- Additional POS consoles may be interfaced for multi-attended self-serve operation.
- The nominal supply voltage is 240 V AC.
- (#) '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.

**NOTE**: The POS controller is NOT able to apply a stored (stacked) fuel delivery.

#### 1.2 System Description

The Auresys Technology model neupos point of sale (POS) system (Figure 1) comprises:

# (i) Point of Sale (POS) Console

The point of sale console comprises a Sunmi model K2 MINI or equivalent (\*) PCbased device using an Android based operating system running neupos version 1.x.x.x software. The software version number is displayed at the bottom left corner of the cashier login screen on the operators display.

#### (ii) Electronic Indications

The Sunmi model K2 MINI POS console has an integral touch sensitive display to provide an indication for the operator (Figure 2) and another integral display to provide an indication for the customer (Figure 3).

#### (iii) Printing Devices

The Sunmi model K2 MINI POS console has an integral receipt printer. An equivalent (\*) external receipt printer may be connected to the POS console. A typical record is shown in Figure 4

(\*) '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 model neupos point of sale control system may include point of sale facilities including cash drawers, a magnetic card or barcode reader and EFT facility. The facilities shall not interact with the console in a way that would cause an incorrect indication of the measured volume or price.

# 1.3 Checking Facilities

# (i) Receipt Printer

The system monitors the condition of the receipt printer and if an error is detected, a visual warning is displayed on the operators screen.

### 1.4 Verification Provision

The point of sale control system has provision for the application of a verification provision mark.

### 1.5 Descriptive Markings

The POS console (##) is marked in a clear and permanent manner, in one location, with the following information:

Submittor's name or mark	Auresys Australia Pty Ltd
Serial number or other unique identifier	
Pattern approval number	NMI S841

(##) May also be known as the POS controller when used in variant 1

### 2. Description of Variant 1

#### approved 13/03/23

With the pattern now to provide certain additional facilities for transactions when interfaced to compatible (#) NMI-approved measuring instruments granted with reference to document NMI M 7.

### 2.1 Key Features

- The system provides point of sale arrangements for a Wedderburn model DS-983 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.
- The POS controllers may be connected in a network to share common PLU data, for totalisation, and to accumulate and retrieve management information.

**NOTE**: The POS system is NOT able to apply a preset tare value

(#) '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.

# 2.2 System Description

The Auresys Technology model neupos point of sale (POS) system (Figure 1) comprises:

# (i) **POS Controller**

The Auresys Technology model neupos POS controller comprises a Sunmi model K2 MINI or equivalent (\*) PC-based device that operates an Android based operating system running neupos version 1.x.x.x software. The software version number is displayed at the bottom left corner of the cashier login screen on the operators display.

### (ii) Electronic Indications

Indications shall satisfy the requirements of document NMI M 7, *Pattern Approval Specifications for Point of Sale Systems*.

The Sunmi model K2 MINI POS console has an integral touch sensitive display to provide an indication for the operator (Figure 5) and another integral display to provide an indication for the customer (Figure 6).

Information additional to that required by document NMI M 7, including totalisation details and product images, may also be indicated.

### (iii) Printing Devices

Transaction records shall satisfy the requirements of document NMI M 7, *Pattern Approval Specifications for Point of Sale Systems*.

The Sunmi model K2 MINI POS console has an integral receipt printer to provide transaction record printing facility. An equivalent (\*) external receipt printer may be connected to the POS console. A typical record is shown in Figure 7.

(\*) '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.

### 3. Description of Variant 2

# approved 13/03/23

With the Sunmi model K2 MINI of the pattern or variant 1 configured to provide self check out facility (Figure 8 and 9) with the neupos software of POS Controller configured in unattended operation mode.

Registered customers can process multiple items including measured and nonmeasured items using the touch sensive integral customer display. Authorisation of payment is processed using an SMS one time passcode with the value of checkout items charged to the registered customers account.

#### TEST PROCEDURE No S841

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.

TESTS

# A. For the pattern (fuel POS systems)

Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instruments to which the pattern is connected, as appropriate, and in accordance with the national Instrument Test Procedures.

- 1. Check the neupos software version number.
- 2. Check that the unit price change for the grade of fuel is implemented to the allocated fuel dispensers when they are available for authorisation.
- 3. Check that the system identifies, displays and prints the correct data for the corresponding number allocated to the fuel dispenser.
- 4. Authorise a delivery and check that the delivery details on the fuel dispenser agree with the receipt obtained.

#### B. For variant 1 (weighing POS systems)

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.
- Check that the POS system faithfully reproduces the measurement data in the same units and scale interval as the connected approved measuring instrument.
- 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. For network systems check to ensure that the measurement data printed on the transaction record is correctly reproduced.
- 5. Ensure that electronic indications and printed information are in accordance with document NMI M 7.

# FIGURE S841-1



Auresys Technology model neupos point of sale control system (Pattern and Variant 1)

	1 A	on	🐣 Stop All Pump	ps Le	sgged in as <b>Tester</b>	≈ 88 :	Of If Customer ran away	3 X ▼ 8:06 PM
1 4.845 L \$ 8.69 Get Payment	2 Idle	3 D) idle	4	5 D) Idle	6	7	1 Unleaded Pump 4.845 L	
8 D idle	9 Inactive	10	11	12	13 ED Inactive	14 P) Inactive	Total Amount (inc GST \$ 0.78) Customer Cart	S 8.69
15	16	17 E) moctive	18	19	20	21	Guava \$ 299 * 0154 kis	5 0.46
22	23	24	25	26	27	28	Total Retail Amount ( inc est \$ 00-	i) \$ 0.46 t to Pay \$ 9.15
29 Dinoctive	30	31 [1]) Inoctive	32				Pay By Cash	Pay By Card
		Ø	Ø	0		<b>(</b> )	ē	

Typical Operator Display (Pattern)

# FIGURE S841 - 3

	•	0 0			
1 Pump	Unlead 17.425	ded L			
Total Amou ( Inc GST \$	nt 5 2.84 )			\$31.27	
Your Payable 1 ( Inc GST \$ 2.	Fotal Ama 84 )	ount		\$31.2	5
- Amount Yo \$32.0	u Paid — 0	Вс	ilance 4 \$0.7	Amount – 75	

Typical Customer Display (Pattern)

FIGURE S841-4

Trans F	Petroleun
ABN 77 9	35 505 416
Yangebup	GasStation
289 Beellar	Dr , Yangebup
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	INVOICE
Pump	1
Unleaded(\$ 1.795/L * 1	7.425 L) \$ 31.27
Total (Inc GST \$ 2.84)	\$ 31.27
Paid	\$ 31.25
Rounding	\$ 0.02
Cash	\$ 32.00
Change	\$ 0.75
••••••	
TerminalID	GSTID3
Order Number	638097296835699033
OrderTime	19-01-2023 12:57:09
Payment Method	Cash
Cashier Name	Tester

A typical receipt (Pattern)

FIGURE S841 - 5

![](_page_10_Picture_2.jpeg)

Typical Operator Display (Variant 1)

# FIGURE S841 – 6

	г	1	
	• •	0	
	Customer Cart		
	Banana	ō	
	1.000 kg (\$ 2.34/kg)	\$2.34	
	Total Amount ( Inc GST \$ 0.21 )	\$2.34	
r	Your Payable Total Amount ( Inc GST \$ 0.21 )	\$2.35	
	Amount You Paid \$2.35	Balance Amount	
And in case of the local division of the loc	Typical Customer Disp	lav (Variant 1)	

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Trans Petroleum	
ABN 77 935 505 416	
Yangebup GasStation	
289 Beeliar Dr , Yangebup	
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	
Banana	\$ 2.34
(1.000 kg * \$ 2.34/kg)	
Total (Inc GST \$ 0.21)	\$ 2.34
Paid	\$ 2.35
Rounding	\$ 0.01
Cash	\$ 5.00
Change	\$ 2.65

A Typical Receipt (Variant 1)

![](_page_13_Picture_2.jpeg)

# Typical Customer Display (Variant 2)

My Cart		Timeout In	: 04:18
Meat Pie			
\$ 2.00	-	1 +	\$2.00
Chicken Paran	nigiana		
\$ 7.40	-	1 +	\$7.40
Pavlova			
\$3.20	-	1 +	\$3.20
add Non Barcode	d Items	🐻 Add V	Veight Items
Total Items : 3 Amount To Pay : <b>\$1</b>	2.60		Checkout

Typical Customer Display (Variant 2)