



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Cancellation

Supplementary Certificate of Approval No S452

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that the approval for use for trade granted in respect of the
Provenco Model 8850 Control System for Fuel Dispensers for Motor Vehicles
submitted by Provenco Retail Automation
 Level 3, IRD Building
 Cnr Ashley & Fergusson Streets
 Palmerston North
 NEW ZEALAND

has been cancelled in respect of new instruments as from 1 April 2010.

Signed by a person authorised by the Chief Metrologist
to exercise his powers under Regulation 60 of the
National Measurement Regulations 1999.

A handwritten signature in black ink, appearing to be 'R. J. ...', written over a horizontal line.



Australian Government

**National Measurement
Institute**

12 Lyonpark Road, North Ryde NSW 2113

Supplementary Certificate of Approval
No S452

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

Provenco Model 8850 Control System for Fuel Dispensers for Motor Vehicles

submitted by Provenco Retail Automation
 Level 3, IRD Building
 Cnr Ashley & Fergusson Streets
 Palmerston North
 NEW ZEALAND.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 December 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S452' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S452' in addition to the approval number of the instrument.

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.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate No S1/0/A.

DESCRIPTIVE ADVICE

Pattern: approved 19 November 2004

- A Provenco model 8850 control system for use with compatible approved fuel dispensers for motor vehicles. The pattern includes the Provenco model 8850 BOS site controller and a Provenco model 8850 operators console.

Variants: approved 19 November 2004

1. With an InterPos model POS operators console.
2. With the Provenco model 8850 BOS site controller and InterPos model POS operators console in the same unit.

Technical Schedule No S452 describes the pattern and variants 1 & 2.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S452 dated 3 December 2004
Technical Schedule No S452 dated 3 December 2004 (incl. Test Procedure)
Figures 1 to 4 dated 3 December 2004

Signed by a person authorised by the Chief Metrologist to exercise his powers under Regulation 60 of the National Measurement Regulations 1999.

A handwritten signature in black ink, appearing to be 'J. G. T.', located in the bottom right corner of the page.

TECHNICAL SCHEDULE No S452

Pattern: Provenco Model 8850 Control System for Fuel Dispensers for Motor Vehicles

Submittor: Provenco Retail Automation
Level 3, IRD Building
Cnr Ashley & Fergusson Streets
Palmerston North NEW ZEALAND

1. Description of Pattern

A Provenco model 8850 point of sale (POS) control system to provide an attended self-service facility for fuel dispensers fitted with Production Engineering model MHP indicators or other compatible (#) approved fuel dispensers. The pattern (Figure 1) includes at least the Provenco model 8850 BOS site controller and a Provenco model 8850 operators console.

1.1 Field of Operation

- The Provenco model 8850 control system is approved for environmental class A, indoor use in a climate-controlled environment between 5°C and 30°C.
 - The system can provide a self-service arrangement for up to 64 approved fuel dispensers equipped with Production Engineering model MHP calculator indicators (as described in the documentation of NSC approval No 5/6A/92A) or other 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 up to two transactions per fuel dispenser, i.e. current sale on fuel dispenser and a stored transaction.
 - For each grade of fuel, the control console can centrally set the unit price for the fuel dispensers
 - The nominal supply voltage is 240 V AC.
- (#) "Compatible" is defined to mean that no additions/changes to hardware/software are required for satisfactory operation of the complete system including all checking facilities.

1.2 System Description

(i) 8850 BOS Site Controller

The Provenco model 8850 BOS site controller (Figure 2) comprises an IBM model 300PL personal computer or equivalent (*) using an OS/2 operating system with *Provenco Site Controller* software version 5.xx. A Provenco Pumpware PCI card is installed in the computer to provide control and communications interface to the fuel dispensers and the 8850 console.

(*) "Equivalent" is defined to mean other proprietary equipment of the same or better specifications requiring no changes to software for satisfactory operation of the complete system including all checking facilities.

(ii) 8850 Operators Console

The Provenco model 8850 operators console (Figure 2) is connected to the site controller via a serial communication interface and includes:

- a visual display unit and programmable keypad for use by the operator;
- a Provenco model 8850 customers display (Figure 2); and
- an Epson TM88 model M129 receipt printer, or other compatible (#) printer.

(#) "Compatible" is defined to mean that no additions/changes to hardware/software are required for satisfactory operation of the complete system including all checking facilities.

(iii) Additional System Facilities

- Point of sale facilities (POS) including a cash drawer, magnetic card reader and electronic funds transfer (EFT) facility, which shall not interact with the console in a way that would cause an incorrect indication of the measured volume or price.
- Dispenser ('pump') status icons which indicate the condition of the fuel dispensers controlled by the 8850 BOS site controller (e.g. 'In use', 'On Hold' or controlled by unattended authorisation device).

1.3 Checking Facilities

- (i) The system monitors the condition of the receipt printer and provides a visual warning of an error; and
- (ii) The system monitors the communication with the fuel dispensers and any error detected is displayed to the operator.

1.4 Verification/Certification Provision

The model 8850 BOS site controller and the model 8850 operators console have provision for a verification/certification mark to be applied.

1.5 Markings

The model 8850 BOS site controller and the model 8850 operators console are each marked with the following data, together in one location:

Manufacturer's name or mark	Provenco, New Zealand
Manufacturer's designation (model number)	8850
Serial number
Approval number	NMI S452
Environmental class	Class A

2. Description of Variants

2.1 Variant 1

With the Provenco model 8850 operators console described for the pattern replaced by an InterPos model POS operators console comprising an IBM compatible computer using OS/2 operating system.

The console is connected to the site controller via an ethernet communication interface and includes:

- a visual display unit and an PREH model Commander MC125 programmable keypad (Figure 3) for use by the operator;
- an Epson model M58DA customers display (Figure 3); and
- an Epson TM88 model M129 receipt printer, or other compatible (#) printer.

(#) "Compatible" is defined to mean that no additions/changes to hardware/software are required for satisfactory operation of the complete system including all checking facilities.

2.2 Variant 2

The InterPos operators console as described in Variant 1 operating on the same IBM compatible computer as the 8850 BOS site controller.

TEST PROCEDURE

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 any relevant tests specified in the Uniform Test Procedures.

1. Check the 8850 BOS site controller software version number by clicking on the top left icon on the start menu and highlighting the 'PEC' graphic.
2. Check that when a fuel delivery is stored into memory the receipt printer automatically issues a receipt with the correct delivery details.
3. Check that when paper is removed from the receipt printer (simulation of fault), the fuel dispenser cannot be authorised for a second delivery unless the transaction for the first delivery has been completed.
4. Check that the unit price change for the grade of fuel is implemented to the allocated fuel dispensers when they are available for authorisation.
5. Check that the control console identifies displays and prints the correct data for the corresponding number allocated to the fuel dispenser.
6. A pre-paid delivery is only possible for fuel dispensers with pre-set facility. For a pre-paid delivery check that the amount displayed on the fuel dispenser equals the pre-paid amount.
7. For systems with fuel dispensers incorporating a pre-set facility, check that the printed receipt contains the correct format and data as per the typical samples in Figure 4.

FIGURE S452 – 1

8850 Operators Console



LAN

8850 BOS Site Controller

Master Processor Board

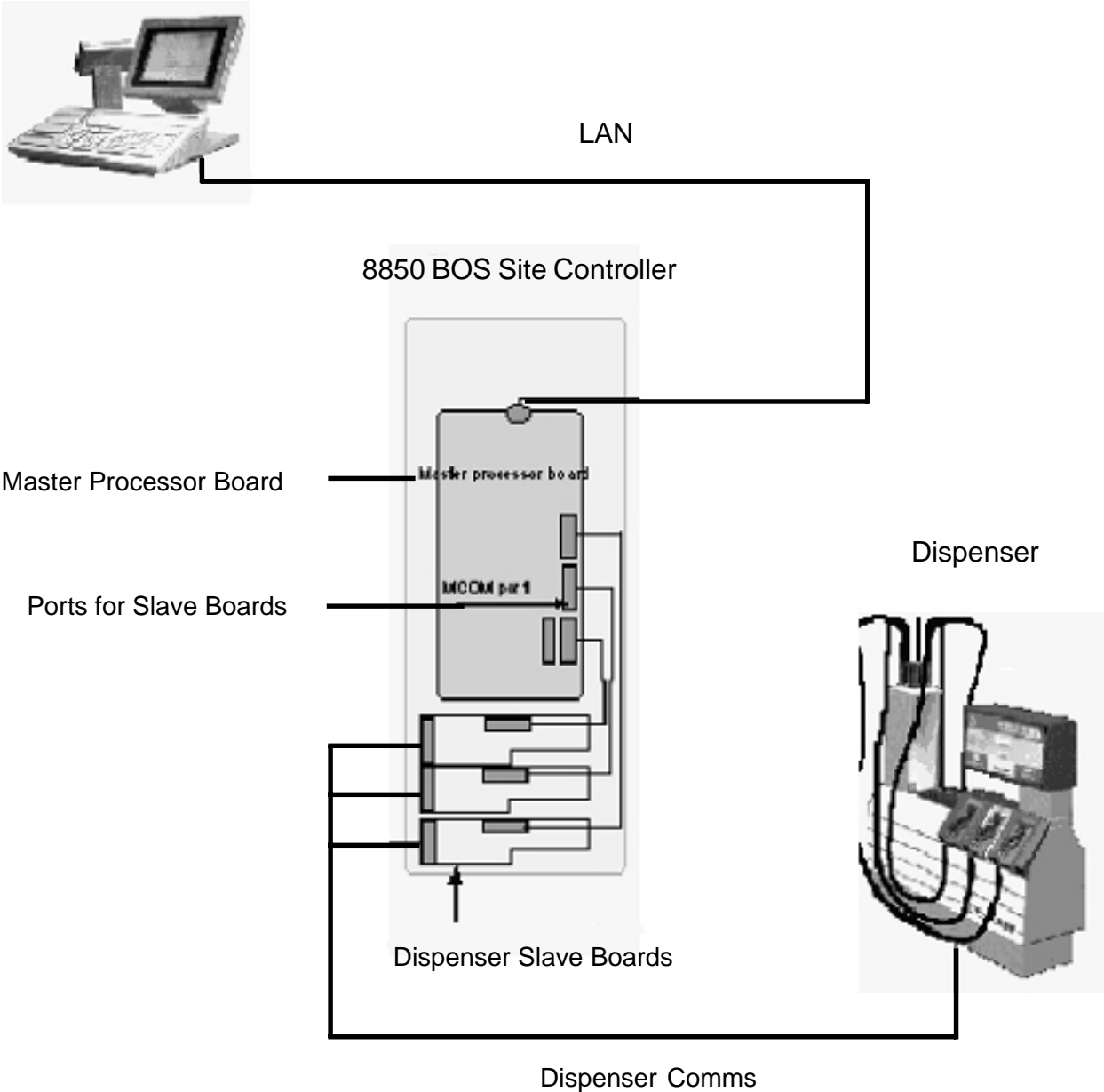
Ports for Slave Boards

Dispenser

Dispenser Slave Boards

Dispenser Comms

Provenco Model 8850 Control System



S452
3 December 2004

FIGURE S452 – 2



Provenco Model 8850 BOS Site Controller



Provenco Model 8850 Customer Displays



Provenco Model 8850 Operators Console

FIGURE S452 – 3



PREH Model Commander MC125 Keyboard



Epson Model M58DA Customers Display

FIGURE S452 – 4

Site Name
23 NOV 2004 09:30 am Agent
TRANSACTION 0002/01

*** TAX INVOICE ***

01 ULTRA HI 3.15L 1.249 \$/L \$ 3.93
CASH \$ 3.95
TAX AMOUNT \$ 0.44

Thank you for shopping at
Site Name
Have a nice day and please call again

Receipt

Site Name
23 NOV 2004 09:30 am Agent
TRANSACTION 0003/01

*** TAX INVOICE ***

01 Prepay ULTRA HI 8.01L \$ 10.00
CASH \$ 10.00
TAX AMOUNT \$ 1.11

Thank you for shopping at
Site Name
Have a nice day and please call again

Prepay Receipt

Site Name
23 NOV 2004 09:30 am Agent
TRANSACTION 0002/01

*** TAX INVOICE ***

***** DUPLICATE RECEIPT *****
01 ULTRA HI 3.15L 1.249 \$/L \$ 3.93
CASH \$ 3.95
TAX AMOUNT \$ 0.44
***** DUPLICATE RECEIPT *****

Thank you for shopping at
Site Name
Have a nice day and please call again

Duplicate Receipt

Site Name
23 NOV 2004 09:32 am Agent
TRANSACTION 0004/01

*** TAX INVOICE ***

01 Prepay refund -\$ 10.00
CASH -\$ 10.00
TAX AMOUNT \$ 0.00

Thank you for shopping at
Site Name
Have a nice day and please call again

Prepay Refund Receipt

23/11/2004 09:33:32
SALE MOVED TO MEMORY PUMP 01
1.55L 1.249 \$/L \$ 1.93
THIS IS NOT A RECEIPT

Memory Receipt