



**Australian Government**  
**National Measurement**  
**Institute**

Bradfield Road, West Lindfield NSW 2070

## **Cancellation**

# **Supplementary Certificate of Approval No S507**

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 G5 Polaris Control System for Fuel Dispensers for Motor  
Vehicles

submitted by      Provenco Retail Automation Limited  
                         25 College Hill  
                         Ponsonby    Auckland  
                         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, consisting of stylized cursive letters, positioned above a horizontal line.



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## **Supplementary Certificate of Approval**

### **No S507**

Issued by the Chief Metrologist under Regulation 60  
of the  
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This is to certify that an approval for use for trade has been granted in respect of the

Provenco Model G5 Polaris Control System for Fuel Dispensers for Motor Vehicles

submitted by           Provenco Retail Automation Limited  
25 College Hill  
Ponsonby   Auckland  
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.

This approval has been granted with reference to document NMI R 117-1, Measuring Systems for Liquids Other than Water, July 2004, being revised.

#### **CONDITIONS OF APPROVAL**

This approval becomes subject to review on 1 January 2013, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S507' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S507' in addition to the approval number of the instrument.

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.

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 10 December 2007

- A Provenco model G5 Polaris point of sale control system for fuel dispensers for motor vehicles.

Technical Schedule No S507 describes the pattern.

#### FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S507 dated 23 June 2008

Technical Schedule No S507 dated 23 June 2008 (incl. Test  
Procedure)

Figures 1 to 3 dated 23 June 2008

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.', is located in the bottom right corner of the page.

## TECHNICAL SCHEDULE No S507

**Pattern:** Provenco Model G5 Polaris Control System for Fuel Dispensers for Motor Vehicles

**Submitter:** Provenco Retail Automation Limited  
25 College Hill  
Ponsonby Auckland NEW ZEALAND

### 1. Description of Pattern

A Provenco model G5 Polaris point of sale control system (Figure 1) to provide an attended self-service facility for compatible (#) approved fuel dispensers for motor vehicles. The fuel dispensers are controlled by the G5 Polaris point of sale system through the G5 Regulus control system (as described in approval NMI S506).

(#) '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.

#### 1.1 Field of Operation

- The model G5 Polaris point of sale control system is approved for environmental class A, a climate-controlled environment between 5°C and 30°C
- The controller can provide a self-serve arrangement for approved Production Engineering 1000 series fuel dispensers, 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
- An additional POS console may be interfaced for multi-attended self-serve operation.
- The nominal supply voltage is 240V AC.

#### 1.2 System Description

The model G5 Polaris point of sale control system comprises:

##### (i) Point of Sale (POS) Console

The point of sale console comprises a Javelin JPOS 605 series point of sale PC or equivalent (\*) using a Microsoft Windows XP operating system running Polaris POS version V1.00.10b software.

(\*) '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.

The point of sale console features a touch sensitive operator's display and includes an integrated column-mounted customer display. An Epson model TM-T88III receipt printer or equivalent (\*) is connected to the console. A typical receipt is shown in Figure 2.

Dispenser ('pump') status icons indicate the condition of the fuel dispensers controlled by the site controller (e.g. 'In use', 'On Hold' or controlled by unattended authorisation device).

## **(ii) Controller**

The Provenco model G5 Polaris forecourt flowmeter controller as described in approval NMI S506. An Epson model TM-T88III printer or equivalent (\*) is connected to the controller for automatic printing of fuel delivery details where required.

## **(iii) Back Office System**

A Javelin model JPOS1000 PC or equivalent (\*) acts as a server for transaction data and store management functions.

## **(iv) Additional System Facilities**

In addition, the model G5 Polaris point of sale control system may include point of sale facilities (POS) including cash drawers, a magnetic card or barcode reader and electronic funds transfer (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.

- (\*) '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.

# **1.3 Checking Facilities**

## **(i) Forecourt Controller**

The forecourt flowmeter controller monitors deliveries authorised to be stored in memory. Details of stored deliveries are automatically printed on the printer connected to the controller. If an error is detected with the controller printer, the ability to authorise a stored delivery will be prevented until the detected error condition is resolved.

## **(ii) Receipt Printer**

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

## **(iii) Customer Display**

The system monitors the condition of the customer display and if an error is detected or out of paper, a visual warning is displayed on the operators screen.

#### 1.4 Verification/Certification

The G5 Polaris point of sale control system has provision for the application of a verification/certification mark.

#### 1.5 Descriptive Markings

The G5 Polaris point of sale control system is marked with the following data (shown below at right):

Manufacturer's name or mark	.....
Model number	.....
Serial number	.....
Pattern approval mark	NMI S507
Year of manufacture	.....
Environmental class	A

#### TEST PROCEDURE

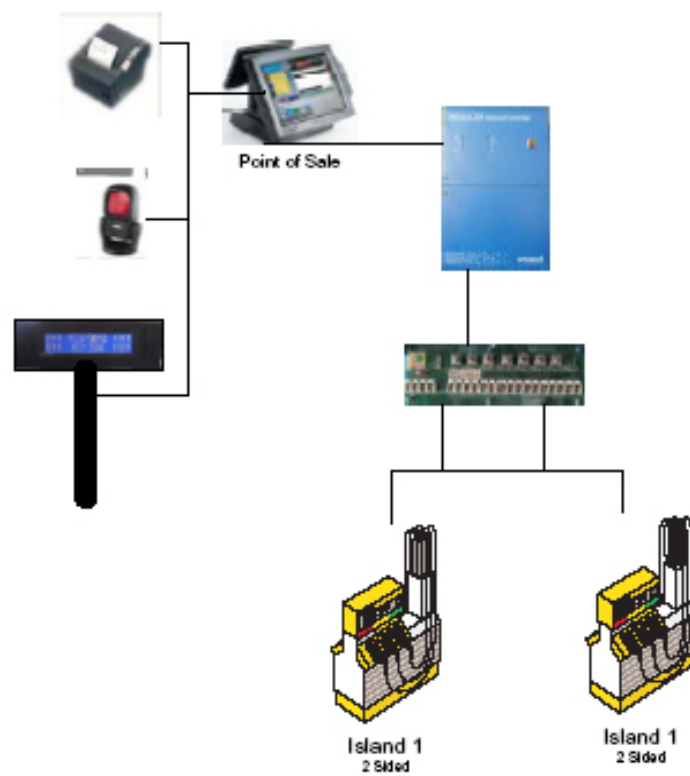
Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instruments to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Uniform Test Procedures.

The maximum permissible errors applicable are those applicable to the fuel dispensers to which the instrument approved herein is fitted, as stated in the approval documentation for the fuel dispensers or in Schedule 12 of the *National Measurement Regulations 1999*.

Points 2-6 are required at commissioning, thereafter they may be conducted at the discretion of the inspecting officer.

1. Check the G5 Polaris POS software version number. The version number is displayed by pressing the blue 'Provenco' icon located in the upper left corner on the point of sale console
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.
5. Authorise a stored delivery and check that the delivery details of the first delivery to be stored in memory are indicated by the printer connected to the forecourt controller.
6. Remove paper from the forecourt controller printer and check that when the printer is unavailable, the warning icon is highlighted and an appropriate message is displayed on the POS console when selected. Ensure that the ability to authorise a stored delivery is disabled.

FIGURE S507 – 1



Typical System Overview

FIGURE S507 – 2

< Site / Company Name>	
<Street Address>	
<Suburb, City>	
<Phone Number>	
dd/mm/yy 00:0000	
Transaction No. X	
ABN 12 345 678 901	
***TAX INVOICE***	
POS: POS X	
Casher: XXXXX	
3 Regular 91	\$19.47*
\$1.629/L 11.95L	
<b>Subtotal</b>	<b>\$19.47</b>
Round Down	\$ 0.02
<b>Price to Pay</b>	<b>\$19.45</b>
Cash	\$20.00
Change	\$ 0.55
Tax Amount	\$ 1.77
* Indicates taxable supply	
Thank You For Visiting	
<Site / Company Name>	

A Typical Receipt