



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

Bradfield Road, West Lindfield NSW 2070

# **Cancellation**

## **Supplementary Certificate of Approval No S506**

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 Regulus 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 a series of loops and flourishes, positioned to the right of the signature text.



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

Bradfield Road, West Lindfield NSW 2070

## **Supplementary Certificate of Approval**

### **No S506**

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 G5 Regulus 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 S506' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S506' 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 Regulus control system for fuel dispensers for motor vehicles.

Technical Schedule No S506 describes the pattern.

#### FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S506 dated 23 June 2008  
Technical Schedule No S506 dated 23 June 2008 (incl. Test  
Procedure)  
Figures 1 and 2 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.', located in the bottom right corner of the page.

## TECHNICAL SCHEDULE No S506

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

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

### 1. Description of Pattern

A Provenco model G5 Regulus forecourt flowmeter controller (Figures 1 and 2) for use with certain approved point of sale (POS) control systems to provide self-service control of compatible (#) approved fuel dispensers for motor vehicles.

(#) '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 Regulus controller is approved for environmental class N for outdoor use between -10°C and 55°C
- The controller can provide a self-serve arrangement for approved Production Engineering 1000 series fuel dispensers, or other compatible (#) approved fuel dispensers.
- The controller may facilitate operation in attended or unattended self-service arrangements when interfaced with a compatible approved Point of Sale system.
- The nominal supply voltage is 240V AC.

#### 1.2 System Description

The model G5 Regulus controller provides the interface between an approved point of sale control system and the fuel dispensers.

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

The model G5 Regulus controller is approved for use with the Provenco model G5 Polaris point of sale control system (as described in the documentation of approval NMI S507) or other POS control system approved for use with the model G5 Regulus controller.

##### (ii) Controller

The model G5 Regulus flowmeter forecourt controller comprises an Embedded PC/104 controller with inbuilt power supply and operates on a Linux operating system. A pump interface board provides the connection interface to the fuel dispensers. Serial and ethernet ports provide connections to additional devices and the point of sale system.

### (iii) Printer

An Epson model TM-T88III printer or equivalent (\*) is connected to the controller for automatic printing of fuel delivery details where required.

(\*) '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

The G5 Regulus controller receives the fuel sale data (unit price, litres dispensed and total price) directly from the fuel dispenser(s). The controller monitors the status of connected fuel dispensers. Error checking verifies that transmitted data is correct.

Additional system checking facilities may be required when the controller is used in an attended or unattended self-service system. The checking facilities are described in the approval documentation for the point of sale system that is interfaced to the controller.

### 1.4 Descriptive Markings

The G5 Regulus controller is marked with the following data (shown below at right):

Manufacturer's name or mark	.....
Model number	.....
Serial number	.....
Pattern approval mark	NMI S506
Year of manufacture	.....
Environmental class	N

### 1.5 Verification/Certification

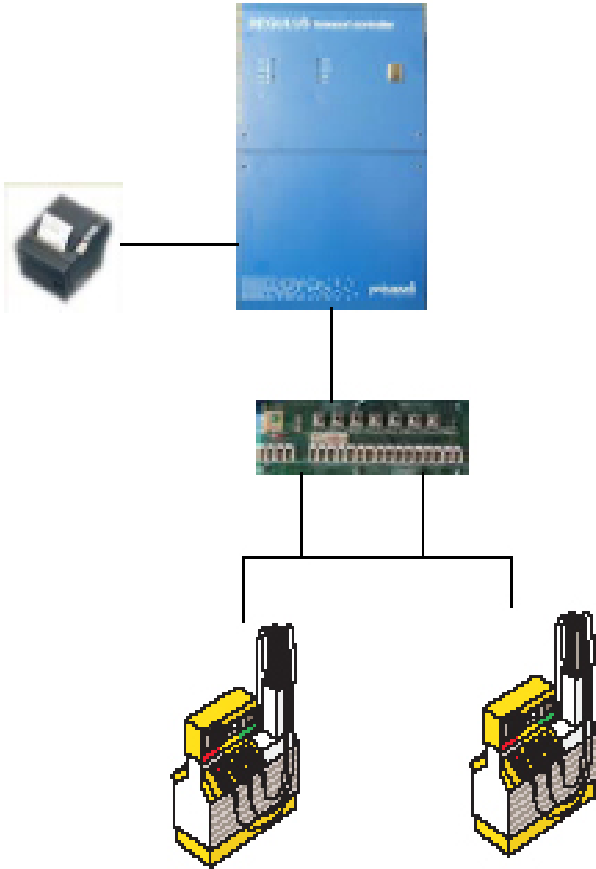
The G5 Regulus controller has provision for the application of a verification/certification mark.

### 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.

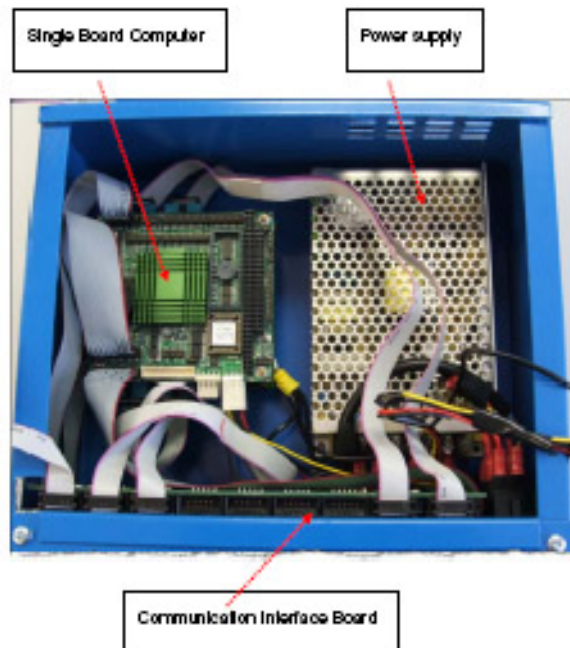
The maximum permissible errors applicable are those applicable to the fuel dispensers to which the instrument approved herein is fitted, as stated in the approval documentation for the fuel dispensers or in Schedule 12 of the *National Measurement Regulations 1999*.

FIGURE S506 – 1



Typical System Overview

FIGURE S506 – 2



Provenco Model G5 Regulus Controller