



Australian Government
**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Notification of Change

Supplementary Certificate of Approval No S450

Change No 1

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

The following changes are made to the approval documentation for the
Postec Model 4DET2 - C Control System for Fuel Dispensers for Motor Vehicles
submitted by Postec Data Systems Ltd
now of Unit A, 45-47 Paul Matthews Road
Albany, North Shore
Auckland NEW ZEALAND.

- A. In Supplementary Certificate of Approval No S450 dated 11 January 2006;
1. The Condition of Approval referring to the review of the approval should be amended to read:
“This approval becomes subject to review on 1 December **2014**, and then every 5 years thereafter.”
 2. The FILING ADVICE should be amended by adding the following:
“Notification of Change No 1 dated 1 April 2009
- B. In Supplementary Certificate of Approval No S450 and its Technical Schedule Variation No 1 both dated 11 January 2006, and in Technical Schedule No S450 dated 9 May 2005, all references to the address of the submitter should be amended to read:
“Unit A, 45-47 Paul Matthews Road
Albany, North Shore
Auckland NEW ZEALAND.”
- C. In Technical Schedule No S450 Variation No 1 dated 11 January 2006, clause **1. Description of Variant 2**, the first line should be amended to read, in part:
“The pattern and variant 1 with version **2.xx** software for use with ...”

- D. In Technical Schedule No S450 dated 9 May 2005;
1. Clause **1.1 Field of Operation**, the following should be added:
- “• The system may include an option for the user to set a pre-set amount only where the fuel dispenser is fitted with a pre-set device.
- In addition, the 4DET can be configured to prompt for entry of a selection of data inputs during the authorisation dialog including:
- Odometer reading
 - Vehicle registration
 - Engine hours
 - Plant number,
- as well as custom defined prompts.”
2. Clause **1.2 System Description**, the final paragraph should be amended to read:
- “Version 2.xx software is used.”

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**

12 Lyonpark Road, North Ryde NSW 2113

Supplementary Certificate of Approval
No S450

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

Postec Model 4DET2 - C Control System for Fuel Dispensers for Motor Vehicles

submitted by Postec Data Systems Ltd
Unit F, 8 Piermark Drive
Nth Harbour Industrial Estate
Albany 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.

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 S450' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S450' 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 15 November 2004

- A Postec model 4DET2 - C control system for use with compatible approved fuel dispensers for motor vehicles.

Variant: approved 6 May 2005

1. Certain other versions, namely models 4DET2 - M and 4DET2 - B.

Technical Schedule No S450 describes the pattern and variant 1.

Variant: approved 10 January 2006

2. Interfaced to an external payment gateway known as PPS.

Technical Schedule No S450 Variation No 1 describes variant 2.

FILING ADVICE

Supplementary Certificate of Approval No S450 dated 9 May 2005 is superseded by this Certificate, and may be destroyed. The documentation for this approval now comprises:

Supplementary Certificate of Approval No S450 dated 11 January 2006
Technical Schedule No S450 dated 9 May 2005 (incl. Test Procedure)
Technical Schedule No S450 Variation No 1 dated 11 January 2006
Figures 1 to 3 dated 9 May 2005



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.', written in a cursive style.

TECHNICAL SCHEDULE No S450

Pattern: Postec Model 4DET2 - C Control System for Fuel Dispensers for Motor Vehicles

Submittor: Postec Data Systems Ltd
Unit F, 8 Piermark Drive
Albany Auckland NEW ZEALAND



1. Description of Pattern

A Postec model 4DET2 - C ('Forecourt Data Entry Terminal') control system to provide unattended self-service operation for fuel dispensers fitted with Transponder Technologies model T5 indicators or other compatible (#) approved fuel dispensers. The system includes at least the 4DET2 - C authorisation terminal (Figure 1) and a Postec model PCC4 communications controller.

1.1 Field of Operation

- The 4DET2 - C authorisation terminal and the PCC4 controller are approved for environmental class N for outdoor use between -10°C and 55°C.
 - The system can provide unattended self-service arrangement for up to 32 approved fuel dispensers equipped with Transponder Technologies model T5 indicators (as described in the documentation of approval NSC S414) or other compatible (#) approved fuel dispensers.
 - The pattern may be used in conjunction with an attendant-operated self-serve console provided the console is approved for mixed-mode operation.
 - 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

The Postec model 4DET2 - C control system allows unattended self-service operation of fuel dispensers. Payment is authorised prior to delivering fuel via a magnetic-stripe card reader or an RF-ID card authorisation device or a PIN pad.

The 4DET2 - C (Figure 1) has a magnetic-stripe card reader. It may also be connected to a separate RF-ID card authorisation device.

The 4DET2 - C authorisation terminal is housed in a weatherproof housing (Figure 2) for outdoor use, and includes an integral keypad and liquid-crystal display (LCD), connected to a separate power supply and receipt printer.

Communication and control of the fuel dispensers is through a serial data connection to the Postec model PCC4 controller (as described in the documentation of approval NSC S398). More than one 4DET2 - C authorisation terminal may be connected to the same PCC4 controller.



Software version number 2.12 is used.

1.3 Checking Facilities

The Postec PCC4 controller monitors the status of fuel dispensers and the Postec 4DET2 - C authorisation terminal displays the condition of the requested dispenser as appropriate (i.e. in use/offline).

(i) Receipt Printer

The system monitors the condition of the receipt printer and provides a visual warning of an error. If the receipt printer is unavailable or out of paper, the LCD will display that a receipt will not be available before a user agrees to authorise a fuel dispenser and continue with a fuel delivery.

(ii) Power Supply

If the principal power supply fails, the 4DET2 - C power supply will enable the printing of receipts for deliveries in progress at the time of failure.

If a communication failure occurs at the moment of power failure, the data contained at the moment of failure will be saved and indicated on the receipt. In addition to the received amounts the receipt shall display the following:

Power Failure:
Receipt is correct
record of transaction

1.4 Markings

The 4DET2 - C authorisation terminal and the PCC4 controller are marked with the following data:

Manufacturer's name or mark
Manufacturer's designation (model number)
Serial number
Approval number	NMI S450
Environmental class	Class N

1.5 Verification/Certification Provision

The authorisation terminal has provision for a verification/certification mark to be applied.

2. Description of Variant 1

The 4DET2 authorisation terminal is available in two other versions – all versions, including the pattern, model 4DET2 - C, have the PIN pad:

- The 4DET2 - M (Figure 3) has an RF-ID card authorisation device fitted internally.
- The 4DET2 - B (Figure 3) only has the PIN pad for authorisation of dispensers.

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.

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

1. Check the 4DET2 software version number. The version number is displayed on the front display during the power on initialisation sequence. Typing the sequence '94158802 MGR' at any time will cause the 4DET2 authorisation terminal to display the software version number. (Note that the keystrokes are not echoed to the terminal display.)
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. Remove paper from the receipt printer to check that when the receipt printer is unavailable, a warning is provided before authorisation of a fuel dispenser can occur.
6. For systems where the fuel dispenser can also be authorised via an attendant-operated self-serve console, check that the console identifies the correct fuel dispenser authorised via the 4DET2 authorisation terminal.

TECHNICAL SCHEDULE No S450

VARIATION No 1

Pattern: Postec Model 4DET2 - C Control System for Fuel Dispensers for Motor Vehicles

Submitter: Postec Data Systems Ltd
Unit F, 8 Piermark Drive
Albany Auckland NEW ZEALAND



1. Description of Variant 2



The pattern and variant 1 with version 2.14 software for use with a Postec model PCC4 communications controller (as described in the documentation of approval NSC S398) incorporating version 6.33 software allowing interfacing to an external payment gateway known as PPS or Payment Processing System, which continuously monitors and authorises valid electronic funds transfers (EFT).

The receipt issued, which contains NMI approved delivery data for the fuel dispensers, also includes PPS data, such as EFT total, GST amount, EFT transaction number, transaction type, terminal ID, account type, etc.

FIGURE S450 – 1



Postec Model 4DET2 - C Authorisation Terminal

S450
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FIGURE S450 – 2



4DET2 - C Authorisation Terminal in a Typical Weatherproof Housing

FIGURE S450 – 3



Postec Model 4DET2 - B or 4DET2 - M Authorisation Terminal