Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

No S487

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.

Triquestra Model Infinity Retail Management System (RMS) Control System for Fuel Dispensers for Motor Vehicles

submitted by Triquestra International Ltd
558 Rosebank Road, 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 Measuring Systems for Liquids Other than Water*, Parts 1 and 2*, dated June 2011.

This approval becomes subject to review on **1/02/17**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern – approved – interim certificate issued	25/01/07
1	Pattern & variant 1 – certificate issued	2/04/07
2	Pattern amended – notification of change issued	30/11/09
3	Pattern & variant 1 – reviewed & updated – certificate issued	28/09/12

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S487' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S487' in addition to the approval number of the instrument, and 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.

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

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

TECHNICAL SCHEDULE No S487

1. Description of Pattern approved on 25/02/07

A Triquestra model Infinity Retail Management System (RMS) point of sale control system (Figure 1) to provide an attended self-service facility for compatible (#) approved fuel dispensers for motor vehicles. The Infinity RMS system includes the point of sale console and flowmeter controller which includes an Integration Technologies model Enabler2 PCI controller card and an Integration Technologies protocol distribution module.

(#) '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 Infinity RMS 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 up to 32 approved Gilbarco Enterprise 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 the fuel dispenser and a stored transaction.
- The system operates in a single mode operation, i.e. authorisation of dispensers via attended method only from multiple POS consoles.
- The nominal supply voltage is 240 V AC.

1.2 System Description

(i) Point of Sale Console

The point of sale (POS) console (Figure 2) comprises a Gladius POS series touchscreen personal computer or equivalent (*) using a Microsoft Windows XP operating system running Infinity POS versions 3.3.4.29 or 4.x.x.xx or 5.x.x.xx software.

The software version number in use may be checked by by pressing the F8 key or selecting the 'Other F8' button on the main POS screen. From the menu select the 'More Options' and 'About' buttons.

The POS console is also connected to the following additional components:

- An Obvios model FV2029H 20 × 2 line purchasers' indicator (Figure 2) or equivalent (*);
- An Epson model TM-T88IV receipt printer (Figure 3) or equivalent (*) – Note that a printer is mandatory for pre-payment transactions; and
- A Powerware model 5110 uninterruptible power supply (Figure 3) or equivalent (*) to provide operation under power failure.

(*) '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) Flowmeter Controller

The flowmeter controller comprises an Integrated Technologies model Enabler2 PCI controller card and Enabler software (as described in the documentation of approval NMI S518) installed in the back office server to provide control and communications interface to the fuel dispensers and the console.

An Integration Technologies forecourt distribution module enables communication with approved fuel dispensers and connects to the Enabler2 PCI controller card (Figure 1).

(iii) Back office server

A Whitebox model BOP4M86014 personal computer or equivalent (*) acts as a server for transaction data and store management functions.

(*) '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.

(iv) Additional System Facilities

In addition, the Infinity Retail Management 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.

Dispenser ('pump') status icons which indicate the condition of the fuel dispensers controlled by the flowmeter controller (e.g. 'In use', 'On Hold', etc.).

1.3 Checking Facilities

(i) Uninterruptible Power Supply (UPS)

The system monitors the condition of the UPS and if an error or power failure is detected a visual warning is displayed on the operator's screen. The ability to authorise deliveries 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 the printer is out of paper, a visual warning is displayed on the operators screen. Figure 4 shows a typical receipt.

(iii) Customer Display

The system monitors the condition of the customer display and if an error is detected or the display is disconnected, a visual warning is displayed on the operators screen. A segment checking function to visually inspect the customer display is obtained by selecting the 'Menu' button on the lower right corner of the main POS screen then selecting the 'Display Check' button.

1.3 Verification Provision

The Infinity POS console has provision for the application of a verification mark

1.4 Sealing Provision

No sealing is required for this pattern and variant.

1.4 Descriptive Markings

The Infinity POS console is marked with the following data (shown below at right):

Manufacturer's name or mark	Triquestra Australia
Model number	……..
Serial number	……..
Pattern approval mark	NMI S487
Year of manufacture	……..
Environmental class	A

2. Description of Variant 1 approved on 28/03/07

The back office server described for the pattern operating on the same personal computer as the point of sale (POS) console.

TEST PROCEDURE No S487

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 National Instrument Test Procedures

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

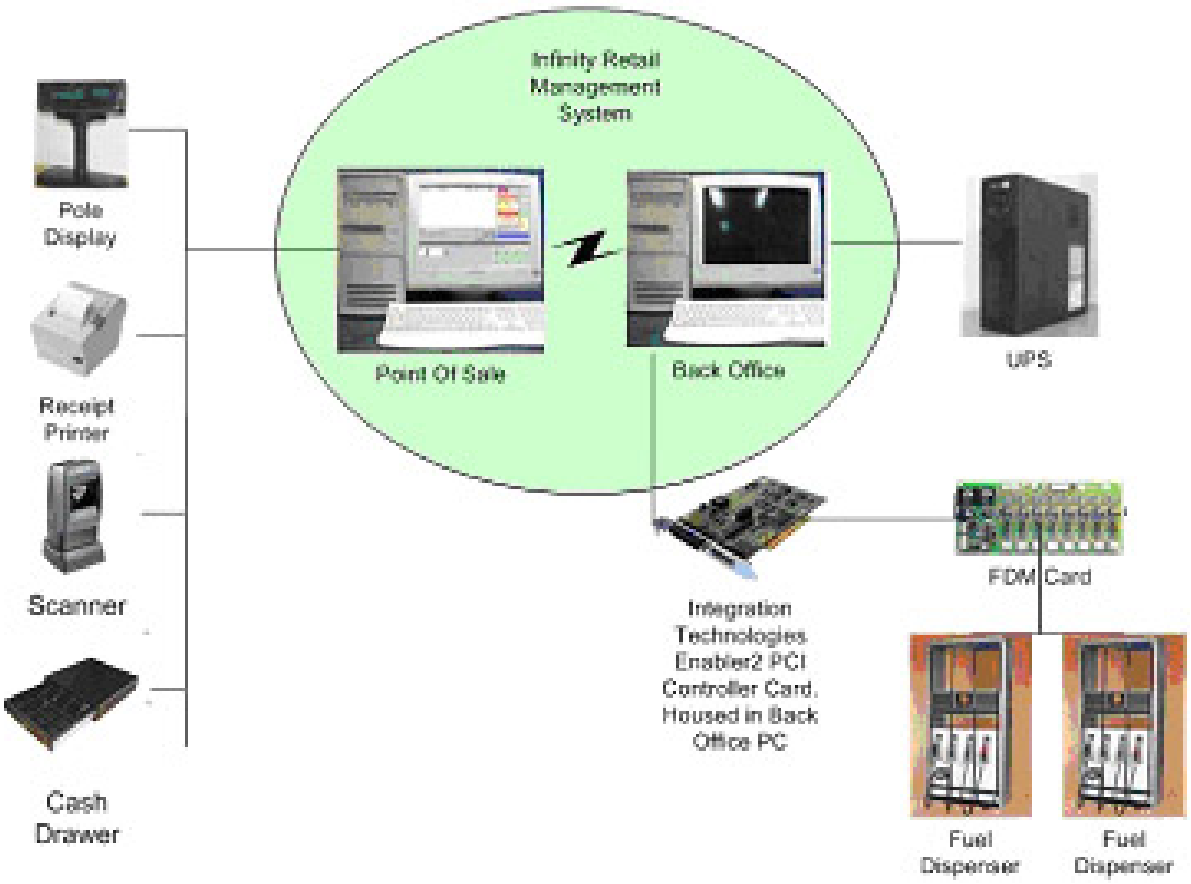
The maximum permissible errors applicable are those applicable to the fuel dispensers to which the instrument approved herein is fitted, as stated in Schedule 1 of the *National Trade Measurement Regulations 2009* or in the approval documentation for the fuel dispensers.

Tests

Points 2-7 are required at commissioning, thereafter may be conducted at the discretion of the inspecting officer.

1. Check the Infinity POS console 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.
5. Check that when principal power supply is disconnected an appropriate message is displayed on the POS console and stored or held sales cannot be authorised.
6. Disconnect the customer display; a warning message is displayed on the POS console and the ability to authorise a stored delivery is disabled.
7. To perform a manual segment check on the customer display select the 'Menu' button on the lower right corner of the main POS screen then select the 'Display Check' button.

FIGURE S487 – 1



Triquestra Model Infinity Retail Management System (RMS) Control System

Typical System Overview

FIGURE S487 – 2

POS Console and Purchasers' Indicator

FIGURE S487 – 3

Epson Printer and Powerware UPS

FIGURE S487 – 4

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          TAX INVOICE
          PH. (00) 000-0000

Receipt No 0010010000026  Operator Infinity

Date 11/08/2011  Time 3:44:50   Lane 1


1  COKE
     1  @   $3.00Ea                =   $3.00

2  CHIPS
     1  @   $2.50Ea                =   $2.50

3  Regular
 27.03 L@  $0.949\L    Pump1       =  $25.64


       Total Transaction Value      $31.14

                          Rounding -$0.04



----------------------------------------
  Cash                               $31.10

----------------------------------------
        All prices include GST
     We know you have a choice !
  Thank you for shopping with us
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Typical Receipt

~ End of Document ~