

National Measurement Institute

Supplementary Certificate of Approval NMI S548

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.

NCR (formerly Retalix) Model StorePoint POS and NCR (formerly Retalix) Forecourt Server Self-serve Control System for Fuel Dispensers for Motor Vehicles

submitted by NCR (formerly Retalix) Australia Pty Ltd

Level 4, 123 Epping Road North Ryde NSW 2113

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, dated July 2004.

This approval becomes subject to review on 1/10/16, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – certificate issued	15/09/11
1	Pattern amended – certificate issued	20/04/12
2	Variant 2 approved – certificate issued	1/11/13

Document History (cont...)

Rev	Reason/Details	Date
3	Pattern & variants 1 to 2 reviewed – Pattern Ammended	10/04/17
	(submittor name) – certificate issued	

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S548' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S548' 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 their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Dr A Rawlinson

TECHNICAL SCHEDULE No S548

1. Description of Pattern

approved on 15/09/11

A NCR (formerly Retalix) model StorePoint POS and Retalix Forecourt Server (RFS) self-serve 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 StorePoint POS system using the Retalix Forecourt Server.

1.1 Field of Operation

- The StorePoint POS console, Retalix Forecourt Server (RFS) and Fuel Interface Box are approved for environmental class A, a climate-controlled environment between 5°C and 30°C.
- The system can provide a self-serve arrangement for approved Gilbarco fuel dispensers or other compatible (#) NMI-approved fuel dispensers configured with Gilbarco protocol.
- 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.
- The system is approved for mixed mode operation, i.e. authorisation of dispensers via unattended method or via an attendant-operated self-serve console
- One or more additional POS consoles may be interfaced for multi-attended self-serve 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.

1.2 System Description

The model StorePoint POS self-serve control system comprises:

(i) StorePoint Point of Sale (POS) Console

The point of sale console is an IBM SurePos 700 series model 4852 point of sale PC or equivalent (*) using a Microsoft Windows operating system running StorePoint POS version V1.10.xxxx software.

The point of sale console features a Fujitsu model 3000L CD15 (*) touch sensitive operators' display. An additional Fujitsu model 3000L CD15 (*) is configured as a customer display. A Citizen model CT-S2000 receipt printer or equivalent (*) is connected to the point of sale console. A typical receipt is shown in Figure 2.

An APC model 420 uninterruptible power supply (UPS) or equivalent (*) is connected to the point of sale console.

Dispenser ('pump') status icons on the operators' display indicate the condition of the fuel dispensers controlled by the NCR (formerly Retalix)Forecourt Server (e.g. 'In use', 'On Hold' or controlled by an unattended authorisation device).

(*) '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.

(ii) Retalix Forecourt Server (RFS)

A Fujitsu model Primergy TX150 S7 server or equivalent (*) running Retalix Forecourt Server software acts as a server for system configuration and management functions. The server communicates with approved fuel dispensers through the port server (see (iii) below) to control authorisation and provide delivery information to the StorePoint POS console.

A Powerware model 5115 uninterruptible power supply (UPS) or equivalent (*) is connected to the RFS.

If the RFS becomes unavailable then a POS console may be temporarily reconfigured to operate the RFS server function simultaneously with the StorePoint POS software.

(iii) Forecourt Interface Box (FIB)

The B&B Electronics model CL-906 Forecourt Interface Box (Figure 3) includes a B&B VLinx model ESP906CL port serial server. The FIB provides the communication interface between approved Gilbarco protocol fuel dispensers and the RFS by converting the relevant pump protocol to an Ethernet network interface. Up to 48 fuel dispensers may be connected to each FIB and multiple FIBs may be connected to the network to allow the RFS to communicate with additional dispensers.

Communication cables connected to the FIB (Figure 3) must be fitted with EMI cable suppression cores suitable for frequency ranges of 30 MHz to 300 MHz.

(iv) Additional System Facilities

In addition, the NCR (formerly Retalix) model StorePoint and Retalix Forecourt Server (RFS) self-serve control system may include other facilities including point of sale cash drawers, a magnetic card and/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.

1.3 Checking Facilities

If an error is detected with any of the following checking facilities, the ability to authorise a stored sale will be prevented until the detected error condition is resolved.

(i) Retalix Forecourt Server

The Retalix Forecourt Server (RFS) monitors deliveries authorised to be stored in memory.

(ii) Point of Sale Customer Display

The system monitors the condition of the POS console customer display and if an error is detected a visual warning is displayed on the operators' screen.

(*) '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.

(iii) Uninterruptible Power Supplies

The RFS and the POS console are each connected to an uninterruptible power supply. The system monitors the condition of the UPS and if an error is detected or power failure occurs, a visual warning is displayed on the operators' screen.

1.4 Verification Provision

Provision is made for the application of a verification mark to the NCR (formerly Retalix) model StorePoint POS and Retalix Forecourt Server (RFS) self-serve control system.

1.5 Descriptive Markings

The NCR (formerly Retalix) StorePoint POS, the RFS and the FIB are each marked with the following data, together in one location, in the form shown at right:

Manufacturer's name or mark	
Model number	
Serial number	
Pattern approval mark	NMI S548
Year of manufacture	
Environmental class	Α

2. Description of Variant 1

approved on 15/09/11

With a B&B Electronics model CL-906TT Forecourt Interface Box (FIB) instead of the model CL-906 FIB of the pattern. This system (Figure 4) is similar to the pattern but can provide a self-serve arrangement for approved Email fuel dispensers or other compatible (#) NMI-approved fuel dispensers configured with Email protocol. The model CL-906TT FIB can also support a mixture of Email and Gilbarco protocol dispensers.

The model CL-906TT FIB (Figure 5) includes a B&B VLinx model ESP906CL port serial server and a Transponder Technologies serial to Email pump converter card.

Communication cables connected to the FIB (Figure 5) must be fitted with EMI cable suppression cores suitable for frequency ranges of 30 MHz to 300 MHz.

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

3. Description of Variant 2

approved on 1/11/13

For use with fuel dispensers which are NMI-approved for use with LNG (liquified natural gas) in which case the indications of product delivered are displayed in kilograms.

A typical receipt for this variant is shown in Figure 6.

TEST PROCEDURE

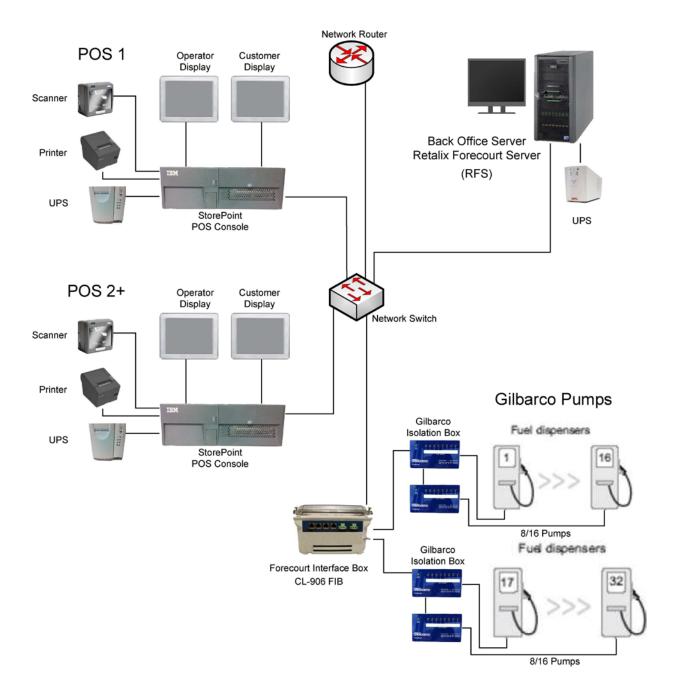
Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instruments to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the National Instrument Test Procedures.

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 the approval documentation for the fuel dispensers or in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Points 2-5 are required at commissioning; thereafter they may be conducted at the discretion of the inspecting officer.

- Check the NCR (formerly Retalix) model StorePoint POS software version number. The version number is displayed in the lower left corner of the operators' 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. Check that when the customers' display is disconnected from the Point of Sale console, a warning message is displayed on the operators' screen. Ensure that the ability to authorise a stored delivery is not possible while the customers' display is disconnected.
- 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



Typical NCR (formerly Retalix) StorePoint POS and NCR (formerly Retalix) Forecourt Server (RFS) Self-serve Control System Overview (The Pattern, with model CL-906 FIB)

EUREKA OPERATIONS PTY LTD TAX INVOICE / ABN 78 104 811 216 www.colesexpress.com.au (03) 555 8483 TOORONGA 8483 TOORAK RD, TOORONGA \$ % UNLEADED PUMP 2 44.63 QTY: 32.13 L @ 138.9 c/L TOTAL \$44.63 44.65 CASH -0.02ROUNDING GST INCLUDED IN THE TRANSACTION \$4.06 % = TAXABLE ITEMS 12/09/11 07:04 PETER Receipt No.1000260 Site No. 8483

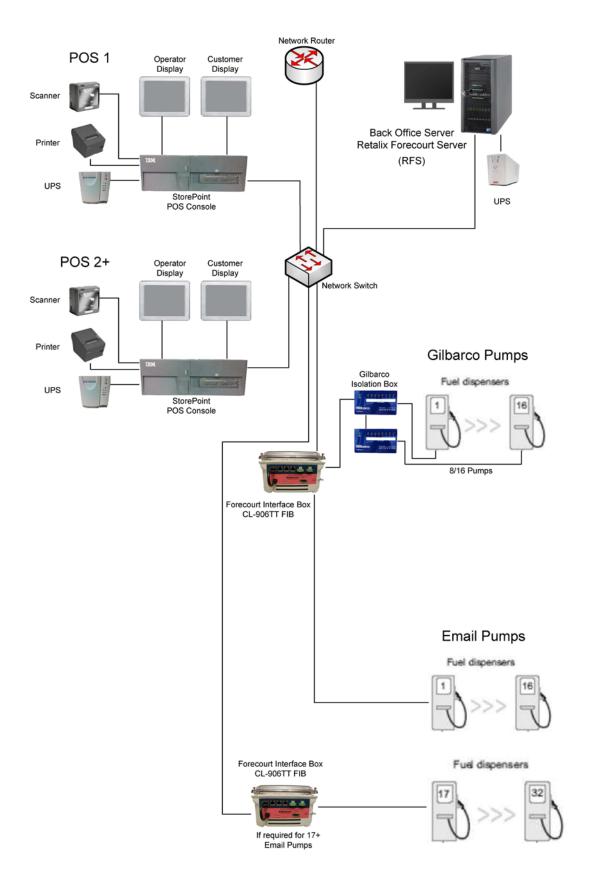
FIGURE S548 - 3





Forecourt Interface Box Model CL-906 FIB

FIGURE \$548 - 4



Typical NCR (formerly Retalix) StorePoint POS and NCR (formerly Retalix) Forecourt Server (RFS) Self-serve Control System Overview (Variant 1, with model CL-906TT FIB)

FIGURE \$548 - 5





Forecourt Interface Box Model CL-906TT FIB

FIGURE S548 - 6

WWW.colesexpress.com.au CEX SINEW 8478 Test (03) 5555 8478 690 Springvale Road, MULGRAVE					
% ULP E10		PUMP 1	12.18		
QTY: 10.9	6 L	@ 111.1 c/L			
% LNG WARM		PUMP 3			
QTY: 9.43	kg	@ 185.5 c/kg	B		
TOTAL			\$29.68		
CASH			29.70		
ROUNDING			-0.02		
GST INCLUDED I	N THE T	TRANSACTION	\$2.70		

A Typical Receipt (variant 2)