Australian Government
Department of Industry and Science

National Measurement Institute

Supplementary Certificate of Approval

NMI S482

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.

Quest Model QOPT V1 Control System for Fuel Dispensers for Motor Vehicles

submitted by Quest Payment Systems Pty Ltd
227 Burwood Road
Hawthorn VIC 3122

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 1/01/17, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – interim certificate issued	7/12/06
1	Pattern approved – certificate issued	15/02/08
2	Pattern reviewed & updated – certificate issued	8/08/12
3	Pattern amended – variants 1 to 3 approved – certificate issued	7/08/15

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI S482’ and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked ‘NMI S482’ 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 Amanda Rawlinson

TECHNICAL SCHEDULE No S482

1. Description of Pattern approved on 7/12/06

A Quest model QOPT V1 control system (Figure 1) to provide unattended self-service facility for compatible (#) approved fuel dispensers for motor vehicles. The QOPT V1 system is a stand-alone card-operated terminal housed in a weatherproof enclosure designed for outdoor use.

(#) '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 QOPT V1 system is approved for environmental class N, an outdoor environment between -10°C and 55°C.
- The system can provide a self-serve arrangement for up to 32 approved PEC 1000 series fuel dispensers (as described in the documentation of approval NSC 5/6A/92A), or other compatible (#) approved fuel dispensers.
- The system is approved for mixed mode operation, i.e. authorisation of dispensers via unattended method or via an attendant-operated self-serve console.
- The nominal supply voltage is 240 V AC.

1.2 System Description

The model QOPT V1 is a stand-alone card-operated terminal housed in a weatherproof enclosure (Figure 2) designed for outdoor use.

A touch-sensitive screen and LCD display is used to select available fuel dispensers for authorisation and printing of receipts. Transactions are authorised using a magnetic or smart card reader and the built-in PIN pad.

The terminal is comprised of the following components installed inside the enclosure:

(i) A Quest model 325-0002-01 industrial computer or equivalent (*) using a Microsoft Windows based operating system running OPTPOS version 1.x.x.x software.

(ii) An Integration Technologies Enabler series PCI controller card (as described in approval NMI S518) installed into the industrial computer to provide control and communications interface to the fuel dispensers.

(iii) An Integration Technologies forecourt distribution module (FDM) enabling communication with approved fuel dispensers and connection to the Enabler series PCI controller card.

(iv) A Quest model 800-0010-02 EFTPOS terminal providing secure card reading and PIN entry for EFTPOS authorisation. The model 800-0010-02 terminal has a built-in magnetic card reader, LCD display and keypad.

(*) '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.

(v) A Quest model 251-0001-01 uninterruptible power supply (UPS) or equivalent (*).

(vi) A Quest model 325-0004-01 receipt printer or equivalent (*).

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 the system will terminate any deliveries in progress and provide receipts for all remaining transactions.

The ability to authorise a further transactions will be prevented until the detected error condition is resolved.

(ii) 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.

1.4 Verification Provision

Provision is made for the application of a verification mark.

1.5 Sealing Provision

No sealing is required for this instrument.

1.6 Descriptive Markings

The QOPT series terminal is marked with the following data (in the form shown below at right):

Manufacturer's mark, or name written in full	…….
Model number	……..
Serial number	……..
Pattern approval mark	NMI S482
Year of manufacture	……..
Environmental class	Class N

2. Description of Variant 1 approved on 7/08/15

A Quest model QOPT V1 control system Technologies Enabler series PCI controller card (as described in approval NMI S518) may now be installed in a remote or 'back office' server computer (Figure 3).

(*) '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.

3. Description of Variant 2 approved on 7/08/15

A Quest model QOPT V2 terminal which has the same features as the pattern (model QOPT V1) but is now in an updated enclosure (Figure 4).

The Quest model 325-0002-01 industrial computer or equivalent (*) using a Microsoft Windows based operating system now runs OPTPOS version 1.x.x.x or 2.x.x.x software.

The Technologies Enabler series PCI controller card (as described in approval NMI S518) may now be installed into the industrial computer, or in a remote or 'back office' server computer (Figure 3).

The system adds an option to receive an automatically transmitted copy of the receipt to an email address or SMS mobile phone rather than returning to the OPT for a printed copy.

(*) '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.

4. Description of Variant 3 approved on 7/08/15

A Quest model QOPT V2 terminal similar to variant 2 but with a Postec PCC series controller (as described in approval NMI S398) used in place of the Enabler controller.

TEST PROCEDURE No S482

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

Maximum Permissible Errors

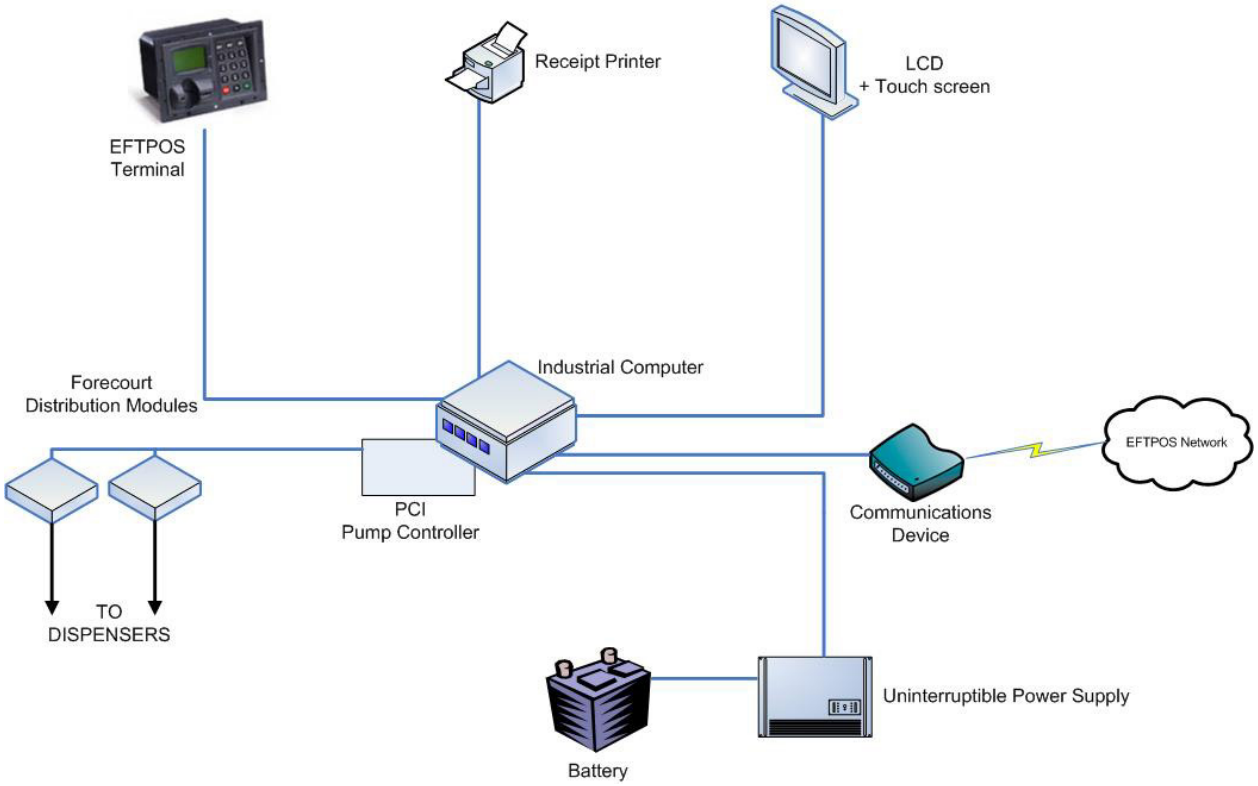
The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*, and are those applicable to the fuel dispensers to which the instrument approved herein is fitted, as stated in the approval documentation for the fuel dispensers.

Tests

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

1. Check the OPTPOS software version number, which is displayed in the bottom right corner of the main menu.
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.

FIGURE S482 – 1

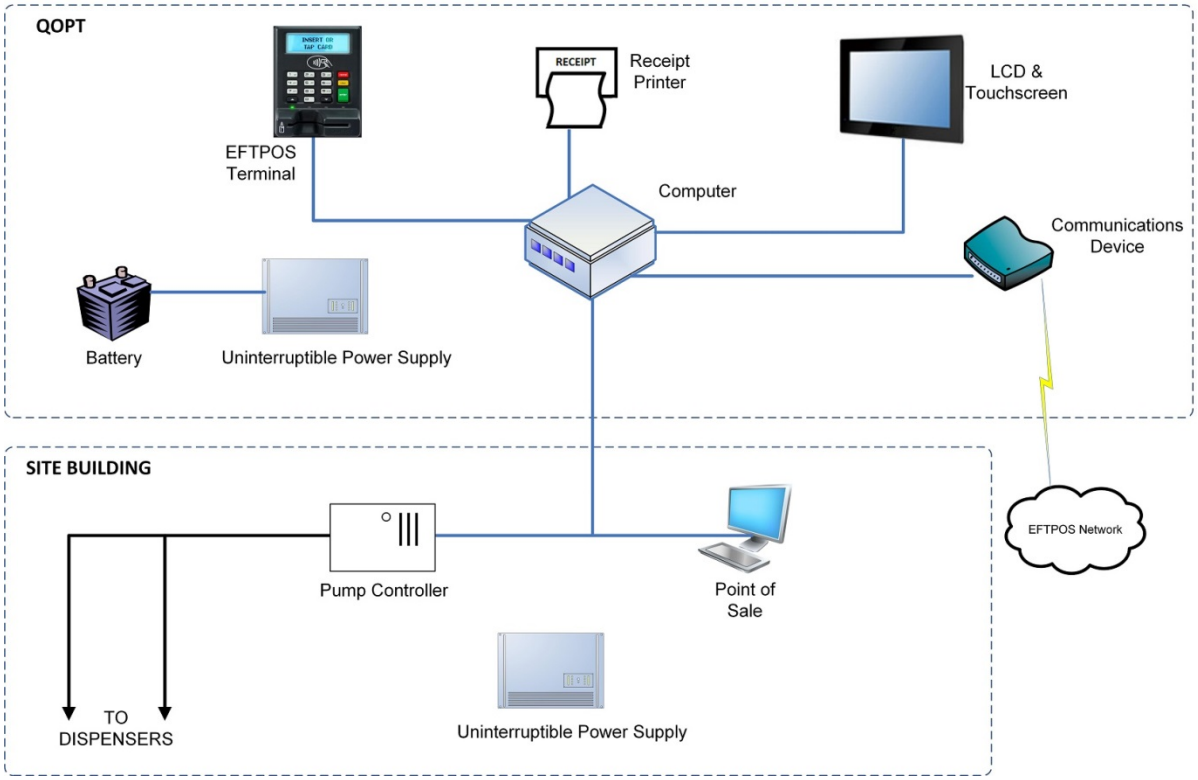


Quest Model QOPT V1 Control System (Pattern) – Typical System Overview

FIGURE S482 – 2

Quest Model QOPT V1 Control System (Pattern)

FIGURE S482 – 3



Quest Model QOPT V2 Control System (Variant 2) – Typical System Overview

FIGURE S482 – 4

Quest Model QOPT V2 Control System (Variant 2)

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