



Australian Government  
Department of Industry, Science,  
Energy and Resources

**National  
Measurement  
Institute**

36 Bradfield Road, West Lindfield NSW 2070

**Supplementary Certificate of Approval  
NMI S805**

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.

Compac Model COM5 Control System for Fuel Dispensers for Motor Vehicles

submitted by     Compac Industries Ltd  
                         52 Walls Rd  
                         Penrose 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*, dated June 2011.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

**DOCUMENT HISTORY**

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	08/12/20
1	Pattern and variant 1 approved – certificate issued	12/03/21

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S805' and only by persons authorised by the submittor.

Instruments purporting to comply with this approval and currently marked 'NMI PS805' may be re-marked 'NMI S805' but 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.

### Special

Certain aspects of this instrument (in particular transaction record printing formats) are able to be configured by the user. Whilst NMI believes that acceptable formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

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



**Darryl Hines**  
Manager  
Policy and Regulatory Services

TECHNICAL SCHEDULE No S805

**1. Description of Pattern** **provisionally approved on 08/12/20**  
**approved on 12/03/21**

A Compac model COM5 control system (Figure 1) to provide unattended self-service facility for compatible (#) NMI-approved fuel dispensers for motor vehicles. This system allows authorisation of fuel measurement by customers without a pre-existing arrangement with the supplier.

Fuel dispensers are controlled by the COM5 control system with a built in communications controller.

**1.1 System Description**

The Compac model COM5 system is an unattended outdoor payment terminal (Figure 2) and may be housed in an IP23 rated enclosure. The enclosure may be standalone or mounted on top of compatible (#) NMI approved fuel dispensers.

Each COM5 system includes an EFTPOS card or contactless reader, a receipt printer, LCD display and key pad and Battery Backup power supply.

**Note:** The COM5 system may pre-authorise transactions prior to a delivery. Pre-authorisation does not control any pre-set or pre-payment control devices fitted to the NMI-approved fuel dispenser.

**(i) Keypad and Display**

The key pad is used to select available fuel dispensers for authorisation and printing of receipts. Transactions are authorised using the EFTPOS card or contactless reader and the built-in PIN pad.

**(ii) Receipt Printer**

A Custom model VPK80III receipt printer or equivalent (\*) is built into the COM5 system.

(\*) '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) Additional System Facilities**

The system may also include RFID or NFC card readers, barcode or matrix code (QR) scanners which may be used to authorise deliveries for registered customers.

The system may also be interfaced to Number Plate Recognition cameras which may be used to authorise deliveries for registered customers.

The COM5 control system includes wired or wireless routers and network switches for internet connectivity.

The facilities shall not interact with the system in a way that would cause an incorrect indication of the measured volume or price.

## **1.2 Checking Facilities**

### **(i) Power Supply**

The system includes a power supply with battery backup. If an error or power failure is detected the system will terminate any deliveries in progress and provide a receipt for the transaction in progress.

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 model COM5 will indicate that a receipt will not be available before a user agrees to authorise a fuel dispenser and continue with a fuel delivery.

### **(iii) Memory device**

The system allocates and stores measurement transaction data to local memory. If insufficient memory is available or an error is detected the ability to authorise further transactions will be prevented until the error condition is resolved.

While the system is online the transaction data stored in local memory is synchronised to an online database. Transactions that have been uploaded successfully may then be overwritten in local memory.

## **1.3 Verification Provision**

Provision is made for the application of a verification mark.

## **1.4 Sealing Provision**

The Compac model COM5 system does not require sealing.

## **1.5 Descriptive Markings**

The Compac model COM5 control system is marked with the following data, in one location:

Manufacturer's name or mark	.....
Pattern approval mark	NMI S805
Model number	.....
Serial number	.....
Environmental class	N

## **2. Description of Variant 1**

**approved on 12/03/21**

A variant of the COM5 unattended control system (Figure 2) that allows authorisation of fuel by registered customers who have an existing arrangement with the supplier.

Systems of this variant do not include EFTPOS facilities and may not include the receipt printer described in **1.1 System Description**.

## TEST PROCEDURE

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

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

The maximum permissible errors applicable are those applicable to the fuel dispenser to which the instrument approved herein is fitted.

Note: Testing should be carried out on initial installation. Thereafter, it need not be done at every verification/certification of the fuel dispensers but may be done periodically at the discretion of the verifying authority. Operation with an authorised test card can only be done in the presence of a representative of the submitter.

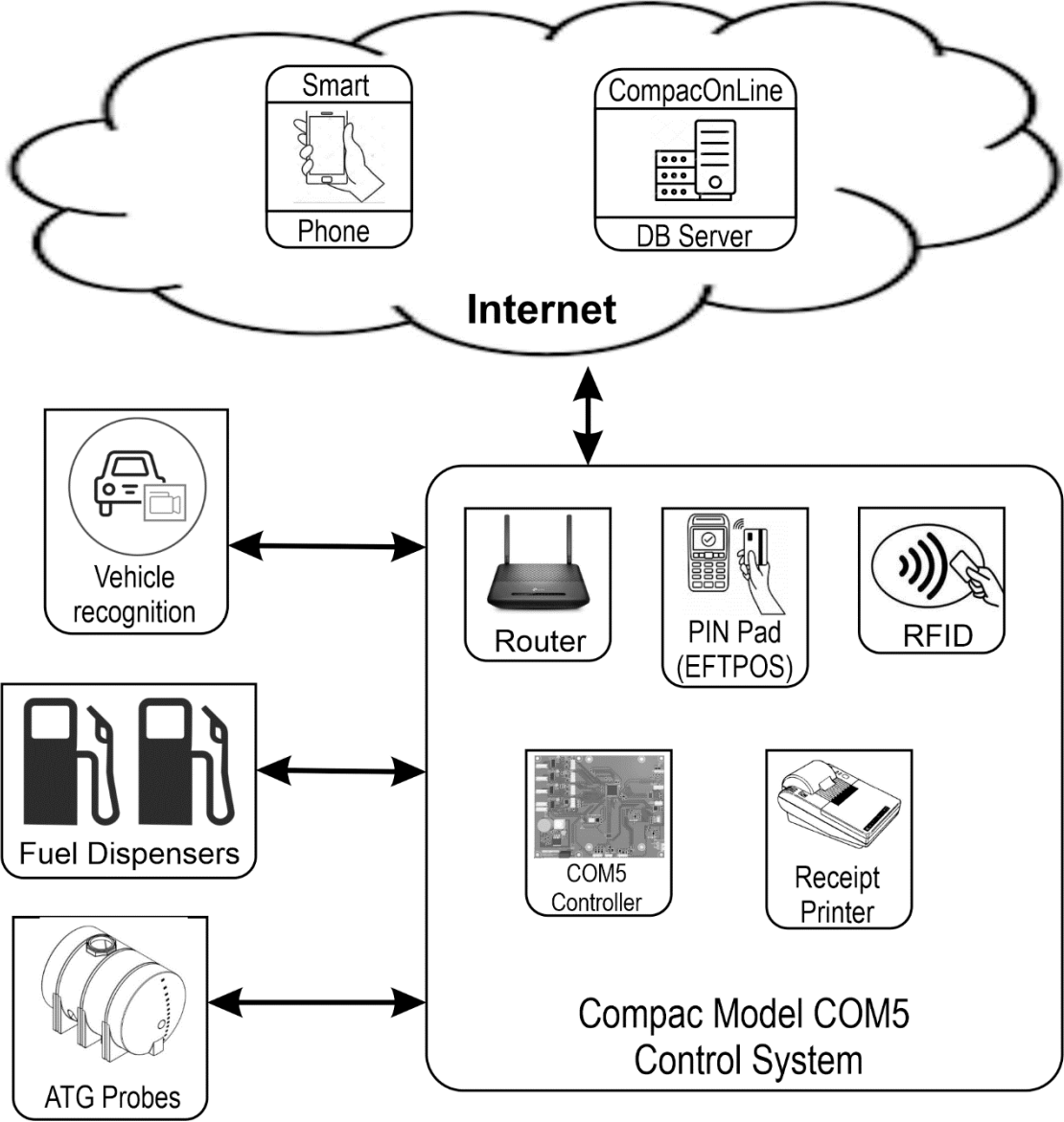
The Compac model COM5 terminal (**pattern**) shall be tested as follows:

1. Check that the system identifies, displays and prints the correct data for the corresponding number allocated to the fuel dispenser.
2. Authorise a delivery and check that the delivery details on the fuel dispenser agree with the receipt obtained.
3. 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.

The Compac model COM5 terminal (**variant 1**) shall be tested as follows:

1. Check that the system identifies the correct data for the corresponding number allocated to the fuel dispenser. Contact the site manager for registered customer access and login information to confirm delivery details on the fuel dispenser agree with the transaction record in the online database.

FIGURE S805 – 1



Compac COM5 Unattended Control System

FIGURE S805 – 2



Compac COM5 outdoor payment terminal (Pattern)

FIGURE S805 – 3



Compac COM5 outdoor payment terminal for registered customers (Variant 1)

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