



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Interim Provisional Supplementary Certificate of Approval NMI PS559

VALID FOR VERIFICATION PURPOSES UNTIL 11 JANUARY 2014

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.

Fluid Management Technology Model Smartfill GEN2 Control System for Fuel Dispensers for Motor Vehicles

submitted by Fluid Management Technology Pty Ltd
39 Marryatt Street
Port Adelaide SA 5015

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, July 2004, being revised.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	11/10/13
1	Variant 1 provisionally approved – interim certificate issued	8/11/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI PS559' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI PS559' in addition to the approval number of the instrument.

1.2 System Description

The Fluid Management Technology model Smartfill GEN2 control system is in a metal, weatherproof enclosure. The terminal comprises a controller, a battery-backed power supply, a keypad, an LCD display and radio frequency identification (RF-ID) tag reader.

The SmartFill GEN 2 uses Fluid Management Technology version V1.xx software. The software version number is displayed at the completion of each delivery and on power up.

The delivery operation is authorised by the user placing an authorised key against the reader sensors or entering a PIN (personal identification number) to identify the equipment to be fuelled and, if required, using their key or PIN to identify the user and entering their odometer reading.

2. Description of Variant 1 **provisionally approved on 8/11/13**

The Fluid Management Technology model Smartfill GEN2 control system as a controller/calculator/indicator for use with compatible (#) approved liquid-measuring systems.

2.1 Field of Operation

The field of operation is as described for the pattern except as follows:

- Liquid temperature range -10°C to 50°C
- Maximum input frequency 1000 pulses/second
- Accuracy Class Class 0.5

2.2 Design/Features

The Fluid Management Technology model Smartfill GEN2 controller/indicator has a graphical, colour LCD display that displays the volume in litres in the range from 0 to 99999.99 in .01 increments for indicating the measured volume of a flowmeter. The controller operates using Fluid Management Technology version V1.xx software.

The instrument's additional features include:

- Dedicated module(s) for the control of solenoids/valves and/or motors on NMI-approved liquid measuring systems. This module is capable of detecting the failure or removal of an approved pulse generator.
- Can operate on 12 to 24 V DC or 240 V AC.

The controller/indicator is approved for use with an Acme model EPU 200 pulse generator as described in the documentation of approval NMI S189B, or any other compatible (#) approved measurement transducer.

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

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