



Australian Government

National Measurement
Institute

Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S620

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.

Electric Ocean Model TM32 Point of Sale (POS) System

submitted by Electric Ocean Pty Ltd
3562 Maleny Kenilworth Road
Kenilworth QLD 4574

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 M7, *Pattern Approval Specifications for Point of Sale Systems*, dated June 2012.

This approval becomes subject to review on 1/03/18, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern provisionally approved – interim certificate issued	7/02/13
1	Pattern amended (validity date) – interim certificate issued	30/04/13
2	Pattern approved – certificate issued	22/11/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI S620' and only by persons authorised by the submitter.

Instruments purporting to comply with this approval and currently marked 'NMI PS620' may be re-marked 'NMI S620' but only by persons authorised by the submitter.

It is the submitter'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 Certificate No S1/0B.

Special Conditions of Approval: (weighbridges)

The pattern has not been assessed for compliance with requirements which are outside the scope of document NMI M7, including those features which control the automation of weighbridge operation or ticket formats for public weighbridges.

This Certificate does not constitute or imply approval for these functions. Details of these requirements can be found on the NMI website.

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

A handwritten signature in black ink, appearing to read 'A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson

TECHNICAL SCHEDULE No S620

1. Description of Pattern **provisionally approved on 7/02/13** **approved on 22/11/13**

An Electric Ocean model TM32 system to provide certain additional facilities for transactions when interfaced to compatible (#) NMI-approved measuring instruments granted with reference to document NMI M7.

1.1 Key Features

- The system provides point of sale arrangements when connected to NMI-approved measuring instruments fitted with a Ranger model 5000 digital indicator (approval NMI S363) or other compatible (#) NMI-approved measuring instruments.
 - The system receives measurement data from the output interface of the approved measuring instrument and computes prices using a product look up (PLU) facility.
 - The system computes total price and is approved for use for transactions direct to the public.
 - Manually entered measurement data shall be indicated as such on a printed transaction record.
 - The system is able to apply a preset tare value up to the maximum capacity of the approved measuring instrument. Preset tare values may be keyboard-entered or stored (e.g. within a PLU facility).
 - The POS controllers may be connected in a network to share common PLU data, to accumulate and retrieve management information including information pertaining to pricing, material codes, vendor details, etc.
- (#) 'Compatible' is defined to mean that no additions/changes to the hardware/software specified in this approval are required for satisfactory operation of the system.

1.2 System Description

The Electric Ocean model TM32 POS system (Figure 1) comprises:

(i) POS Controller

The Electric Ocean model TM32 controller comprises a PC-based device that operates a Microsoft Windows-based operating system running TM32-POS version SW1.01.x software which connects to a shareable database. The software version number is displayed by on the TM32 startup screen.

(ii) Electronic Indications

Indications shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

A Samsung model LS22B300B computer monitor or equivalent (*) is connected to the POS controller to provide an indication for the operator (Figure 2).

Note: There is no customer display fitted to the POS system.

(iii) Printing Devices

Transaction records shall satisfy the requirements of document NMI M7, *Pattern Approval Specifications for Point of Sale Systems*.

An OKI model B410D printer or equivalent (*) is connected to the controller to provide transaction record printing facility.

Note: Tickets have NOT been assessed for compliance with the requirements for Weighbridge Measurement Tickets as given in relevant Licensing Directives of the trade measurement section of NMI as published on the NMI website.

A typical record is shown in Figure 3.

(*) 'Equivalent' is defined to mean other proprietary equipment of the same or better specifications requiring no changes to the software specified in this approval for satisfactory operation of the system.

(iv) Truck Weighing Functions

Providing functions intended specifically for truck weighing applications, including provision for 'truck and product' identification data to be stored in memory.

The truck weighing functions provide for:

- simple vehicle weighing, where the gross weight of a vehicle is determined by a single weighing; and
- first/second weighing, where a vehicle is weighed before and after a loading or unloading operation.

(v) Additional System Facilities

The system may include additional peripheral devices including but not limited to barcode scanning devices, RFID card readers, driver control stations, programmable logic controllers (PLC), input/output controllers, video surveillance cameras, video overlay devices and other plant/site-specific control systems. The facilities shall not interact with the system in a way that would cause an incorrect indication of the measured quantity or price.

1.3 Verification Provision

Provision is made for the application of a verification mark.

1.4 Descriptive Markings

The POS controller is marked in a clear and permanent manner, in one location, with the following information:

Submittor's name or mark
Serial number or other unique identifier
Pattern approval number	NMI S620

TEST PROCEDURE No S620

The POS system shall be tested in addition to any tests specified in the approval documentation for the measuring instrument/s to which the POS system is connected, as appropriate

The POS system shall be tested in the normal operational mode of the instrument and device, not in 'training mode' or any other management mode.

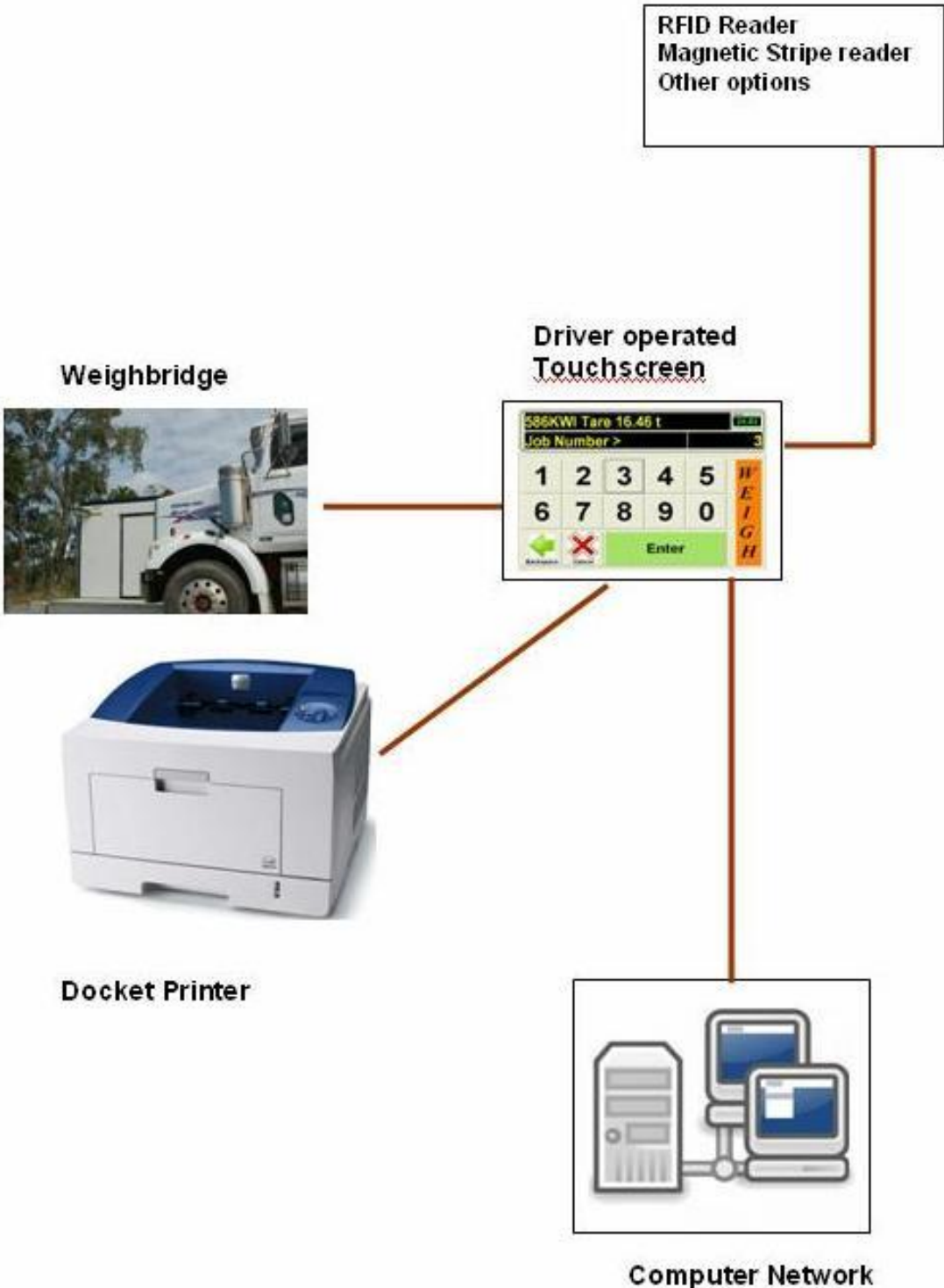
Maximum Permissible Error

The maximum permissible error for price computation is ± 0.5 cent.

TESTS

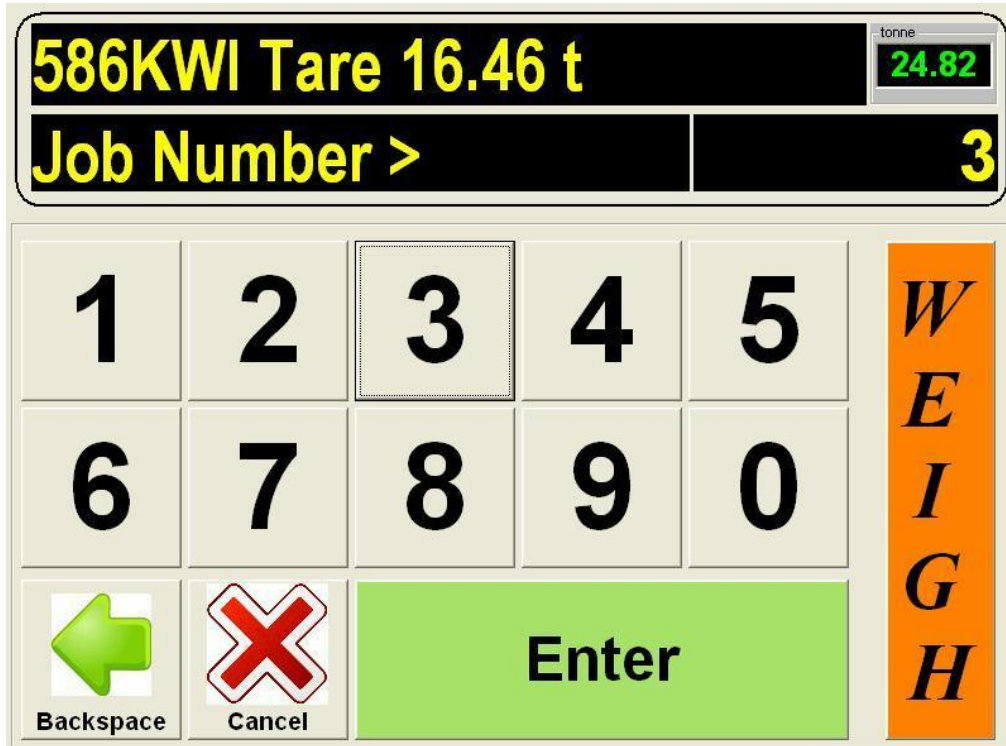
1. Check the software version number/s.
2. Check that the POS system faithfully reproduces the measurement data in the same units and scale interval as the connected approved measuring instrument.
3. Check that the system performs correct price computation, and computes and indicates a correct unrounded subtotal. For cash payment methods, check that any rounding calculation is correct.
4. Perform a measurement with a preset tare applied and confirm that the POS system correctly calculates and indicates a net measurement result.
5. Manually enter some pre-determined measurement data and ensure that the printed transaction record clearly indicates the transaction as such.
6. For network systems check to ensure that the measurement data printed on the transaction record is correctly reproduced.
7. Ensure that electronic indications and printed information are in accordance with document NMI M7.

FIGURE S620 – 1



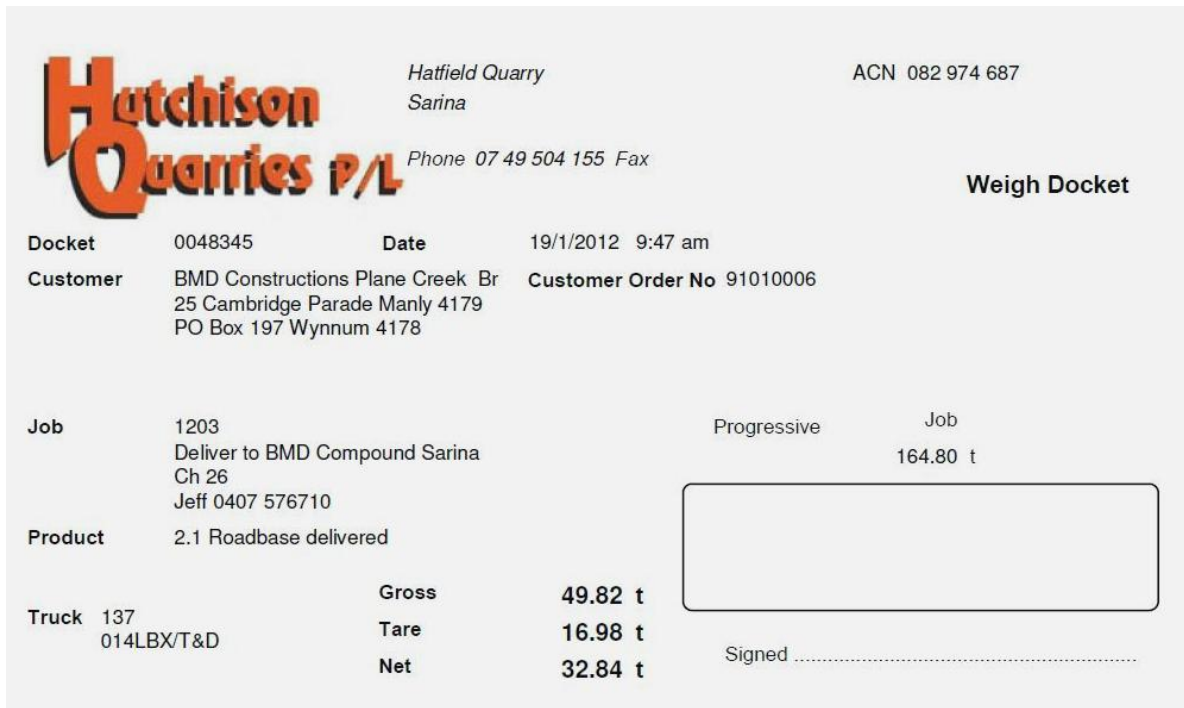
Typical Electric Ocean Model TM32 Point of Sale (POS) System

FIGURE S620 – 2



Typical Operator Display

FIGURE S620 – 3



A Typical Receipt

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