



CERTIFIKAT

No. SC0504-10

PARTS CERTIFICATE

(certificate for a part of a measuring system for LOTW)

Outdoor Payment terminal (OPT) for cards with integrated pump controller function, System 3S

Issued to

Multiple Card Systems A/S, Erantisvej 40, DK-4700 Naestved, Denmark.

In respect of (part of instrument)

Payment terminal device for cards with integrated pump controller function, intended for use with fuel dispensers for motor vehicles.

Characteristics/rated operating conditions

The evaluated part of a measuring system for LOTW is a self service device for direct sales, interruptible, unattended delayed payment, including a printer and an integrated pump controller.

Accuracy class	0,5
Mechanic class:	class M1
Electromagnetic class:	class E1
Ambient temperature limits:	-40°C to +40°C
Humidity:	condensing
Location:	open

In accordance with

WELMEC Guide 8.8, Issue 1 "General and Administrative Aspects of the Voluntary System of Modular Evaluation of Measuring instruments under the MID".

This Parts Certificate is the positive result of the applied voluntary system of modular evaluation, according to WELMEC Guide 8.8, for a part of a measuring system for the continuous and dynamic measurement of quantities of liquids other than water.

This Parts Certificate is free to use by manufacturers of complete measuring instruments.

Applicable essential requirements

- MID, Annex I, Essential requirements
- MID, Annex MI-005, Measuring systems for the continuous and dynamic measurement of quantities of liquids other than water (LOTW)

Harmonised standards and normative documents used

Applicable parts of the following normative documents referred to in the Official Journal of the European Union 2006/C 269/01:

- OIML R 117 Edition 1995 (E), Measuring systems for liquids other than water
- OIML D 11 Edition 2004 (E), General requirements for electronic measuring instruments



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EN 45 011

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Further applied documents

- WELMEC 7.2, Software Guide (Issue 4)
- The Measuring Instruments Regulation, STAFS 2006:4
- Regulations and Guidelines concerning Measuring Systems for the Continuous and Dynamic Measurement of Quantities other than Water, STAFS 2006:9
- SP's Certification Rules SPCR 045/046/047

Validity

Valid until September 15, 2020.


Miscellaneous

This issue of the certificate is the 1st edition.

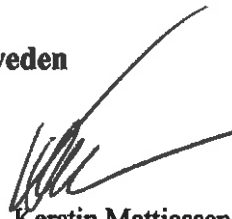
The principal characteristics, approval conditions are set out in the appendix hereto, which forms part of the approval documents and consists of 7 pages. All the plans, schematic diagrams and documentations are recorded under reference file P800339. The evaluation report P800339 B has been issued in accordance with WELMEC Guide 8.8, Voluntary system of Modular Evaluation.

Borås September 15, 2010

**SP Technical Research Institute of Sweden
Certification**



Lennart Aronsson
Certification Manager



Kerstin Mattiasson
Certification Officer



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0 Conditions

The use of this Parts Certificate is limited to:

Combination with other parts of a measuring system (e.g. fuel dispenser, memory device) under the following conditions:

- One of the communication protocols defined in this certificate is used
- The other parts of the measuring system having an EC-type examination certificate, Evaluation Certificate or Parts Certificate covering compatibility with the communication protocol used
- The other parts of the measuring system having a National Type approval covering compatibility with the communication protocol used

Other parties are free to use this PC.

The device must correspond with the following specifications:

1 Design of the device

1.1 Construction

Payment terminal description

The outdoor payment terminal (OPT) is a self service device for unattended delayed payment (card), direct sales, in an interruptible measuring system. It includes a printing device and an integrated pump controller function. It does not include a presetting or memory device.

The OPT authorizes payment cards (company or bank card) by means of online communication to a card acquirer. It then permits the customer to select a dispenser and fuel his vehicle. The OPT controls the dispenser by opening it for use and read out transaction data. After fuel delivery is completed, the OPT completes the transaction, and the customer can request a receipt by re-inserting his payment card.

The OPT works unattended, by customer dialogue via the 7 inch touch screen, a card reader and a PIN entry device.



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Appendix to
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dated September 15, 2010



User interface and controller section

Receipt printer section (opened in this picture)

Service section, with power supply and interfaces.

Wiring and foundation section



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Appendix to Certificate issued by an Accredited Certification Body

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1.2 Components included

Card reader	Sagem INT-5010 or equivalent*
Main computer board	Advantech PCM-9375
Operating system	Microsoft Windows XP Embedded, Version 2002 Service Pack 2 (or later version)
Legally relevant software:	
Application software	SBA, checksum 56DA701B
Service agent software	CCBox, checksum 4A345379
Hard disk drive	Fujitsu MHV2040AH (40 GB) or equivalent*
Expansion board	MCS PC/104 LON
Receipt printer	Swecoin TTP 2030
PIN Entry Device	Sagem SWE-1315 or equivalent*
Display	Hitachi TX18D16VM1CAB or equivalent*
Display backlight controller	Hitachi INVC657 or equivalent*
Touch panel	Zytronic ZYBX7-0 0002B or equivalent*
Touch panel controller	Zytronic ZXY-U-OFF-32-B or equivalent*
Interface board, incl. piggy back boards	MCS MUX102, MUX1PG01 and MUX2PG01
GPIO Interface	MCS AKT101.S01.REV-F
Power supply unit	MCS PSPC105b.S01, Rev. B
Battery, 3 pcs	B.B. Battery BP1.2-6 (6 V, 1.2 Ah) or equivalent*
Heating fan	DBK Cirrus 42F275AAC (275 W output) or equivalent*
Thermostat for heating fan	Stego KTO or equivalent* Set point: +15°C
Enclosure	MCS 07051146

* with CE-marking and suitable climate specification



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1.3 Optional equipment and functions subject to MID requirements

Not applicable.

1.4 Technical documentation

For market surveillance the construction and included components are described in 1.1 and 1.2. The metrological software is identified by the checksum, which can be accessed according to 5.3.

1.5 Integrated equipment and functions not subject to MID

Not applicable.

2 Technical data

2.1 Rated operating conditions

Payment terminal device for cards, intended for use with fuel dispensers for motor vehicles. Self service device for direct sales, interruptible, unattended delayed payment, including a printer and pump controller function.

Measurement range

Scale interval, printed volume

same as dispenser, but not smaller than 0,01 l

Scale interval, printed price

same as dispenser, but not smaller than 0,01 "PRICE"

Accuracy class of measuring system

0,5 or 1,0.

Environments classes / influence quantities

Mechanic:

class M1

Electromagnetic:

class E1

Ambient temperature limits:

-40°C to +40°C

Humidity:

condensing

Location:

open

2.2 Other operating conditions

Not applicable.

3 Interfaces and compatibility conditions

Communication with other parts of a measuring system using one of the following protocols:

Dispenser:

IFSF protocol via expansion board PC/104 LON

or

Tatsuno protocol via MUX interface boards

or

Wayne current-loop protocol via MUX interface boards

or

Autotank ACTL protocol via MUX interface boards

or

Gilbarco protocol via MUX interface boards

CNS host:

COX protocol

Installation: Unshielded communication cable.



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The payment terminal may only be used in a measuring system with:

- all volume and price indicating and memory devices having the same scale interval as System 3S
- a memory device on which measurement data are registered (OIML R 117, 5.10.3.1.1, 5.10.3.1.5, 5.10.3.2)

4 Requirements on production, putting into use and utilisation

4.1 Requirements on production

No special requirements identified.

4.2 Requirements on putting into use

The following functional test shall be performed. It may be performed in the factory.

Final test System 3S	
Serial Number	49 _____
Final Test - System 3S	
24 Hours Switched-on Test	
Checksums at startup: SBA: 56DA701B, CCBOX: 4A345379	
Touch test/setup	
Keyboard test	
Date and Time Ok	
Cardreader test	
Closing down on battery ok	
Open/Close printer door	
Receipt Printout Tested	
Mux communication	
Ethernet Communication	
Extra mounting plate	
Led light	
Thermostat adjusted 15 C	
Installed Key Sagem keyboard S/N:	
Overall Quality	
Test Date:	
Test completed by:	
Authorised Signature by Senior Production Staff:	





4.3 Requirements for consistent utilisations

No special requirements identified.

5 Control of the measuring tasks of the device in use

5.1 Documentation of the procedure

No special requirements identified.

5.2 Special equipment or software, if applicable

No special requirements identified.

5.3 Identification of

- Hardware

The construction and included components are described in 1.1 and 1.2.

- Software

The legally relevant software is identified by the checksums (see 1.2), which is displayed at start of the terminal.



Example of how the checksums are displayed

5.4 Calibration-/adjustment procedure

Not applicable.

6 Security measures

6.1 Sealing

The payment terminal is not sealed.

6.2 Data logger

The payment terminal may only be used in a measuring system with a memory device on which measurement data are registered (OIML R117 (1995), 5.10.3.1.1, 5.10.3.1.5, 5.10.3.2).



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7 Labelling and inscriptions

7.1 Information to be borne by and to accompany the instrument

The marking plate/label mounted on the device shall contain the following information:

- the name and address of the manufacturer
- the serial number of the payment terminal and year of manufacture
- the designation or type name
- the Parts Certificate number, SC0504-10, of the payment terminal
- the ambient temperature range
- mechanical class
- electromagnetic class
- place for the verification sticker

7.2 Conformity marking in accordance to MID article 17

This Parts Certificate is not an EC-type examination Certificate. Therefore the payment terminal must **not** be marked with the supplementary metrology marking "M xx", following the CE marking.

7.3 Further inscriptions, if necessary

No special requirements identified.



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