T e s t   r e p o r t

Issued by	:	NMi Certin B.V., accredited by the national accreditation body (RvA), based on the ISO/IEC 17025, with identification number L029. RvA is signatory member of both the Multi-Lateral Agreement of the European cooperation for Accreditation (EA) and the Mutual Recognition Arrangement of the International Laboratory Accreditation Cooperation (ILAC).
Applicant	:	Adam Perakende Otomasyon Sistemleri Ltd. Şti. 3132. Sokak No: 33 Yaşamkent / Ankara Turkey
Measuring instrument	:	Point of Sale

	Manufacturer	:	Adam Pos Co.Ltd.
	Type	:	MyaPos

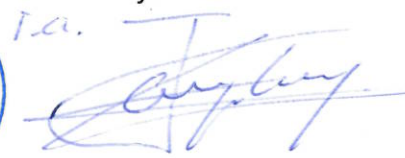|		
Test specifications	:	Welmec guide 2.2 issue 3, Welmec guide 2.3 issue 3
Testing period	:	October up to and including November 2013
Result	:	The measuring instrument complies with the requirements of Welmec guide 2.2 issue 3, Welmec guide 2.3 issue 3 as reported on the following pages.
Issue date	:	2013-11-28

Performed by:

R. Scholten
Approvals expert

Reviewed by:

H.S. Schouten
Senior Approvals Expert

TESTING
RvA L 029

Contents

GENERAL INFORMATION CONCERNING THE TYPE

Application N°:	13200559
Type designation:	MyaPos
Manufacturer:	Adam Pos Co.Ltd.
Applicant:	Adam Perakende Otomasyon Sistemleri Ltd. Şti.
Instrument category:	Point of Sale

Identification of the legally relevant software:

Software module	Version	Checksum
MyaDialog6.dll	-	126402748028380648902268584880144

Identification of non legally relevant software that is present on the system and used for the evaluation:

Software module	Version	Checksum
myapos.exe	-	-

Hardware setup:

Device	Manufacturer	Model
weiging instrument	Mettler-Toledo	Diva
computer	-	-
printer	Epson	-
customer display	-	2 lines of 20 characters

Documentation:

Document name	Identification
technical_description.pdf	-
declarations_2013-10-27-084805-1.jpg	-

Additional information about the equipment under test:

GENERAL INFORMATION CONCERNING THE TYPE (continued)

Use this space to indicate additional remarks and/or information.

Screen shot for a weighed item:

Screenshot for a non-weighed item:

Screenshot for an article with a manual entered weight:

Note:
1 The text (in blue) in this vendor screen is identical to the text on the customer display.

Summary of type evaluation

Application N°:   13200559
Type designation: MyaPos

Tests	page	Passed	Failed	N.A.
Checklist explanatory notes	6			
Checklist Welmec 2.2	7	X		
Checklist Welmec 2.3	14	X		

Checklist explanatory notes

Application N°:   13200559
Type designation: MyaPos

For each article the checklist shall be completed according to this example:

	Passed	Failed	N.A.
when the instrument fulfills the article:	x		
when the instrument does not fulfill the article:		x	
when the the article is not applicable:			x
when the article is not observed here:	-	-	

If appropriate, the results stated in this checklist may be supplemented by remarks on additional pages.

Checklist Welmec 2.2

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Devices of the POS

X	Weight indication repeated on the POS (1)
X	Unit price indication present on the POS
X	Price to pay indication present on the POS
	Price calculation
	Preset tare

Printer

	Built-in
X	Connected
	Not present but connectable
	No connection

General requirements of construction

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
4.1.1.1		Suitability for application	X			
4.1.1.2		Suitability for use	X			
4.1.2.1		Fraudulent use	X			
4.1.2.2		Accidental breakdown and maladjustment	X			
4.1.2.3		Controls	X			

Descriptive markings

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
7.1.1	A.3	Compulsory in all cases				
		- manufacurers mark or name	X			
7.1.2	A.3	Compulsory if applicable				
		- name or mark of manufacturers agent			X	
		- Type designation	X			2
		- serial numbers			X	
		- identification mark on separate but associated units			X	
		- provisions for a test certificate number	X			
7.1.3	A.3	Presentation of descriptive markings				
		- indelible	X			3
		- easy readable	X			
		- grouped together in a clearly visible place	X			

Difference between results

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
3.6.3		Differences				
		- no difference between digital indications and print-outs	X			

Remarks:

1   POS devices that are the only source of display of all the primary indications of a weighing instrument are not covered by Welmec 2.2.

2   File name.

3   In software enclosed.

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Req. EN45501	Testing proc.	Indicating device(s)		Passed	Failed	N.A.	Remarks
4.2.1		Quality of reading					
		Reading: -reliable, easy and unambiguous	operator display	X			
			customer display	X			
			printer	X			
		size shape and clarity	operator display	X			
			customer display	X			
			printer	X			
4.2.2.1	A.3	Units of					
		- mass	operator display	X			
			customer display	X			
			printer	X			
		- currency	operator display	X			
			customer display	X			
			printer	X			
		Form of indications					
		- for one indication, one unit of mass		X			
		- scale interval in the form (1, 2 or 5) x 10k				X	1
		- same scale interval for all indicating devices, and printing devices		X			
4.2.2.2		Form of digital indication					
		- at least one figure at right				X	1
		Decimal sign					
		- separate at least one figure to the left and all to the right				X	1
		Zero					
		- indication of zero figures				X	1
		- only one non-significant zero to the right				X	1
		- for values with a decimal sign, non-significant zero only in third position				X	1
4.4.4		Digital indications other than primary indications				X	Existent
							Non-existent
		- quantities identified by units or symbols or signs thereof		X			
		- weight values (not weighed) shall be clearly identified with MAN or complete wording or		X			
		- display only temporarily on manual command and				X	
		- shall not be printed				X	
4.4.5		Digital printing				X	Existent
							Non-existent
		- clear and permanent		X			
		- figures ≥ 2 mm high		X			
		- name or symbol of units of measurements above column of values or		X			
		- to the right of values		X			

Remarks:

1   Defined by the connected non-automatic weighing instrument.

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Tare devices							Existent
						X	Non-existent

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
4.6.10		Consecutive tare operations				
		- indicated or printed tare weight values clearly designated			X	
		(if tare devices operative at the same time)				
4.6.11		Printing net or gross				
		- without designation (gross weight or net weight)			X	
		- designation: by G or B (gross)			X	
		by N (only net printed)			X	
		- designation of net and tare by N and T (if net printed with gross and/or tare)			X	
		- instead of G, B, N and T, complete words			X	
		- printing separately net and tare with identification (different tare devices)			X	
4.6.5		Visibility of operation				
		- operation indicated operator display			X	
		customer display			X	
		- net with sign "NET", "Net", "net" or complete word (digital indication)			X	
		- NET dissapears if gross displayed temporarily (not allowed for direct sales)			X	
		- tare value or letter "T" (mechanical adding tare)			X	
4.14.3		Direct sales to the public				
		- The public is allowed to see				
		- whether tare devices are in use			X	
		- wheter their setting is altered			X	
		- Only one tare shall be in operation at any given time			X	
		- While tare or preset tare is in operation recalling of gross values is prohibited			X	

Remarks:

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Preset tare							X	Existent
								Non-existent

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
4.7.1		dT = d or automatically rounded to d			X	3
		transferred from one range to another one with larger e_i, shall be rounded to the latter (multiple range)			X	3
		tare value ≤ Max_1 for the same net weight value (multi-interval) and calculated net value rounded to the scale interval for the same net weight value			X	3
4.7.2		operates automatically if clearly identified with load	X			
4.7.3		4.6.5 applies			X	3
		possibility to indicate preset tare			X	3
		if calculated net printed than preset tare value is printed as well			X	4
		4.6.11 applies			X	4
		designation of preset tare by PT or complete word			X	4
4.14.4		Direct sales to the public:				
		- indicated on separate display clearly differentiated from weight display			X	3
		- reduction of tare value not permitted			X	3
		- cancelling of tare effect only if no load on the load receptor			X	3
		- impossible to operate if a tare device is in operation			X	3
		- cancelled at the same time as PLU if associated with PLU	X			

Miscellaneous checkings (direct sales to the public)						

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
4.13.9		When a significant fault is detected				
		- visible or audible alarm provided for customer and (1)			X	
		- data transmission prevented (1)			X	
		- until user takes action or cause disappers			X	

Remarks:

1   Checked by:

     [X] verifying the compliance with documents

     [ ] simulating faults

    This check does not duplicate the disturbance tests 12.1 through 12.4.

2   The preset tare value is send to the non-automatic weighing instrument and only the net value is used by the software.

3   Defined by the connected non-automatic weighing instrument.

4   Not applicable for direct sales to the public.

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Indication device (direct sales to the public)

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
4.14.6		Figures of primary indications (1)				
		- high ≥ 9,5 mm (digital devices)	X			
		- the weight indication and the unit price and the price to pay indications must be positioned adjacent to each other	X			

Price computing instruments (direct sales to the public)

Req. EN45501	Testing proc.			Passed	Failed	N.A.	Remarks
4.15.1		Visible to both vendor and customer					
		- weight	operator display	X			
			customer display	X			
			printer	X			
		- unit price	operator display	X			
			customer display	X			
			printer	X			
		- price to pay	operator display	X			
			customer display	X			
			printer	X			
		- if applicable: number for non-weighed articles	operator display	X			
			customer display	X			
			printer	X			
		- if applicable: unit price for non-weighed articles	operator display	X			
			customer display	X			
			printer	X			
		- if applicable: price to pay for non-weighed articles	operator display	X			
			customer display	X			
			printer	X			
		- if applicable: price totals	operator display	X			
			customer display	X			
			printer	X			
4.15.3		Price computing					
		- multiplication of weight and unit price as indicated				X	2
		- rounding to the nearest interval of price to pay				X	2
		- unit price: price/kg or price/100g		X			3
		Indications of weight , unit price and price to pay visible					
		- for at least 1 s after stable indication and after any introduction of unit price and while load on the load receptor		X			
		- freezing for ≤ 3 s and not possible to introduce or change unit price (if indication has been stable before and would otherwise be zero)				X	
		- printing weight, unit price and price to pay		X			
		- same data not printed twice to the customer		X			4

Remarks:

1   Only valid for the indications observed by the customer.

2   Price computing for weighed articles is performed by the non-automatic weighing instrument.

3   Price/kg only.

4   A duplicate ticket is marked as a duplicate.

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Req. EN45501	Testing proc.	Price computing instruments (direct sales to the public) (cont.)	Passed	Failed	N.A.	Remarks
4.15.4		Additional functions for trade and management				
		- if all transactions are printed for customers and	X			
		- shall not lead to confusion	X			
4.15.4.1		Prices for more than one equal articles				
		- number of articles shown on weight or supplementary display and	X			
		- without taken for a weight and	X			
		- article price shown on unit price or supplementary display	X			
4.15.4.2		Totalisation on one or several tickets				
		- price total indicated on price-to-pay display and	X			
		- printed accompanied by a special word or symbol and	X			
		- reference to commodities whose prices are totalized if a separate ticket is issued for total			X	
		- all prices-to-pay shall be printed and price total shall be the algebraic sum of these prices	X			
4.15.4.3		Instrument used by several vendors or to serve more than one customer at the same time				
		- provided connection between transactions and vendor or customer identified			X	
4.15.4.4		Cancellation previous transactions				
		- price-to-pay shall be printed with comment (transaction already printed)			X	
		- transactions clearly differentiated from normal transactions (transaction displayed to customer)	X			1
4.15.4.5		Printing additional information				
		- clearly correlated to transaction and	X			
		- does not interfere with assignment of weight value to unit symbol	X			
4.15.5		Self service instrument				
		- designation of product			X	

Remarks:

1   Price displayed with a minus sign.

Checklist Welmec 2.2 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Disturbances

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
5.2		Acting upon significant faults (in case 5.1.1 b)				
		- instrument automatically inoperative, or (1)			X	
		- visual or audible indication until user takes action or fault dissapears (1)			X	

Display check

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
5.3.1		Upon switch-on				
		- signs of indication are active and non-active long enough to be checked by operator	X			3

Interface

Req. EN45501	Testing proc.		Passed	Failed	N.A.	Remarks
5.3.6		Interface (2) shall not allow				
		- functions and measurement data to be inadmissible influenced by peripheral devices or other connected instrument or disturbances	X			
5.3.6.1		- displaying data which could be mistaken for weighing results	X			
		- falsifying weighing results (displayed, processed, stored)	X			
		- falsifying displayed primary indications (direct sales)	X			
5.3.6.2		- need not to be secured if functions in 5.3.6.1 cannot be performed or initiated	X			
5.3.6.3		- shall transmit data so that peripheral device can meet requirements	X			

Remarks:

1   Checked by:

       | X | verifying the compliance with documents

       | | simulating faults

    This check does not duplicate the disturbance tests 12.1 through 12.4.

2   Interface in the POS for connection to for example the NAWI or bar-code scanner.

3   Customer display only.

Checklist Welmec 2.3

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

This checklist essentially refers to the examples of acceptable solutions given under No 3.1 to 3.4 of Welmec guide 2.3.
Other solutions may be chosen by the manufacturer which should then be explained in the documentation and
and in this report on the software examination.

The abbreviations are used in the following meaning:

PM	=	Program module subject to legal control
TP	=	Type-specific parameter
DP	=	Device specific parameter
VV	=	Variable value
PSI	=	Protective software interface

Protection of the legally relevant software

Req. WG 2.3	Checklist item no.		Passed	Failed	N.A.	Remarks
3.1	1.1A	Closed shell of the programs subject to legal control (1)				
		- Automatic booting of the PMs			X	
		- User has no access to the operating system of the PC			X	
		- User has no access to other programs than the approved ones			X	
		- The complete set of commands (eg function keys or commands via external interfaces) is given and shortly described			X	
		- A written declaration of the completeness is given			X	
	1.1B	User accessible operating systems and/ or programs (1)				
		- Description of the commands and functions available to the user	X			
		- Checksum over the machine code of the PMs and TPs is generated	X			2
		- Legally relevant program cannot be started if code is falsified	X			
	1.2	Checksum over the DPs is generated			X	2
	1.3	Audit trail for the protection of the DPs is described			X	2
	1.4	Practical test of the performance of some documented functions with the following commands:	X			
		- several sales operations with weighed items				
		- several sales operations with non-weighed items				
		-				

Software interfaces

Req. WG 2.3	Checklist item no.		Passed	Failed	N.A.	Remarks
3.2	2.1	PMs are defined and separated from the modules not subject to legal control by a defined PSI	X			
	2.2	PSI itself is defined as part of the PMs	X			
	2.3	The functions of the PMs that may be released via the PSI are defined and described	X			
	2.4	The parameters that may be exchanged via the PSI are defined and described			X	
	2.5	The description of the functions and parameters is conclusive and complete	X			
	2.6	Each documented function and parameter does not contradict EN45501:1992/AC1993	X			
	2.7	The application programmer is instructed by appropriate means (eg. In the software documentation) about the requirements concerning the PSI	X			

Remarks:

1   The system has to comply with 1.1A or 1.1B.

2   The program does not use any TP or DP's.

Checklist Welmec 2.3 (cont.)

Application N°:	13200559
Type designation:	MyaPos
Date:	2013-10-24
Observer:	RS

Software identification							
Req. WG 2.3	Checklist item no.		Passed	Failed	N.A.	Remarks	
3.3	3.1	Checksum over the PMs and the TPs is generated	X			1,2	
	3.2	Every PM and TP is included in this checksum	X			1,2	
	3.3	Checksum over the DPs is generated			X	2	
	3.4	Every DP is included in this checksum			X	2	
	3.5	The checksums (or other signatures) are generated as documented and may be confirmed at verification	X				
	3.6	Audit trail does exist and may be checked at verification			X		

Software documentation							
Req. WG 2.3	Checklist item no.		Passed	Failed	N.A.	Remarks	
3.4	4.1	A complete list of PMs with a description of each PM is supplied	X				
	4.1	A complete list of the legally relevant parameters and a short description of each parameter is supplied separately for:					
		- TPs			X		
		- DPs			X		
		- VVs	X				
	4.3	A complete set of commands to be exchanged via the PSI is supplied	X				
	4.4	A written declaration of the completeness of the lists under 4.1, 4.2 and 4.3 is given	X				
	4.5	A description of the following securing measures is given:					
		- checksums	X				
		- software identification	X				
		- audit trail (eg event counter, event logger)			X		
	4.6	Instructions for checking the software identification number(s) at verification are given	X				
	4.7	A written declaration is given that the freeprogrammable system, including its software, does meet the requirements of EN45501:1992/AC 1993 clause 5.3.6	X				

Remarks:

1   PM only.

2   The program does not use any TP or DP's.