

QPS Evaluation Services Inc.

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TESTING - CERTIFICATION - FIELD EVALUATION Energy Efficiency Verification - CB Scheme - IECEx Scheme CE Marking - ATEX

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Report No: LR1123-2R1		Issue Date: November 3, 2011
Issued By: George Shu		Reviewed By: Scott Airdrie
N		A cott Clindie,
Customer Name:	Address:	
Nanoptix Inc.	699 Champlain St	treet, Dieppe, New Brunswick, Canada E1A 1P6
Contents: Certificate of Conformity: 1	Page; Report: Pag	ges 1 to 16 Photos: Pages 6-14, including 14A

Project No. and	Revised By	Reviewed By	Pages:	Description of Changes:
Date				
LR1123-2				Original report. Transfer from
November 3,				QPS/SGS report number
2011				LRE1123-2/1991415
LR1123-2R1	Joseph Nuwame	Scott Airdrie	1, 4, 5.	To Update Report LR1123-2 to
November 21,			And	add model HSVL,(950100) EZ-
2011	11.0		14A	Load (102317 or 950009). Also
	Joshiniana_	0 0	added.	correction to Report to read H/S
	//* /	Scottlind		Kiosk "C" 950000 or 103544 and
		+ Ourgh		H/S Kiosk "V" 950007 or 103430

SUBJECT

Component type thermal printer. Rated DC 24V, 2.4A, Class III. Model name:

- H/S KioskTM "C" (950000 or103544),
- H/S KioskTM "V" (950007 or 103430)
- HD-KioskTM "Thick Cutter" (950012)
- HD-KioskTM "Thin Cutter" (950013)
- EZ-LoadTM (102317)
- EZ-LoadTM Stretch (950009)
- HSVL (950100)

APPLICABLE STANDARDS

The product was tested/evaluated to the following standards:

- Information Technology Equipment Safety Part 1: General Requirements, CSA C22.2 No. 60950-1-07, Second Edition, Dated March 27, 2007.
- Information Technology Equipment Safety Part 1: General Requirements, UL 60950-1 Second Edition, Dated March 27, 2007.

CONDITIONS OF ACCEPTABILITY

The products covered in this report are incomplete in construction features or limited in performance capabilities and are intended for use and evaluation in association with other product(s). Consideration should be given to the following when the component is used in or with another product.

- 1. The end-use product that incorporates this Component Type Thermal Printer shall be separately evaluated to the applicable standard(s);
- 2. The equipment powered by an appropriately certified (external) SELV Power Supply with an output rating of 24Vdc, 2.50Amps (minimum); and
- 3. Final (electrical) installation shall comply with NEC Part 1 (NFPA 70) for USA and CEC Part I for Canada respectively.
- 4. Temperature Testing should be considered on this component when installed in the end product higher than 50C ambient; and
- 5. Proper warning shall be provide with end product for the cutter accessibility.

MARKINGS

On the Equipment Exterior:

Equipment is plainly marked in a permanent manner in a place where the details will be readily visible after the installation with the following:

1. <u>Markings</u> – The product is marked using lettering on a pressure-sensitive label as described in this report.

On the Equipment Exterior:

Equipment is plainly marked in a permanent manner in a place where the details will be readily visible after installation with the following:

The following markings are required:

- The cQPSus Certification Mark; the letter "C" must appear in the 8 O'clock position and the letters "US" must appear in the 4 O'clock position adjacent to the QPS Certification Mark;
- The qualifying statement "Electrical Safety" or the equipment standard number must appear directly below the Certification Mark;



- applicant's identification company name, trademark or QPS file reference (LR1123);
- Model designation;
- date code/serial number;
- complete electrical ratings (DC 24V, 2.4A)

<u>Installation, Operating and Safety Instructions</u> – Safety instruction of this product is provided by the manufacturer as required by the standard.

DESCRIPTION

The product is a component type thermal printer, supplied by an appropriately certified (external) SELV Power Supply with an output rating of 24Vdc, 2.5Amps (minimum).

All models are identical with similar circuit board and high speed motor/cutter mechanism assembly and only differ by the metal frame for mounting to the host.

EZ-LoadTM Stretch is a variation on the EZ-LoadTM having same printer, but taller to accommodate a larger roll of paper (6").

HSVL Printer uses a different print mechanism with a different motor listed in critical components list.

POWER CONNECTIONS

DC jack, supplied by an appropriately certified (external) SELV Power Supply with an output rating of 24Vdc, 2.5Amps (minimum).

FACTORY TESTS: N/A

No manufacturing or production line tests are required because the products covered under this report are powered through an approved SELV Power Supply.

Tests

The model was presented as a representative sample of the product and subjected to the test requirements of CSA C22.2 No. 60950-1-07, Second Edition, Dated March 27, 2007, UL 60950-1 Second Edition, Dated March 27, 2007 with satisfactory results under project LRE1123-2 dated April 29, 2010.

The following tests were performed as specified under project LRE1123-2 dated April 29, 2010. No further tests were considered necessary.

UL60950-1/CSA-C22.2 No. 60950-1-07 CLAUSE NO.	INFORMATION
1.6.2	Input Current
1.7.13	Durability Test
4.5.1	Heating test
5.3	Abnormal operation and fault conditions

The test methods and results of the above tests have been reviewed and found in compliance with the requirements in CSA C22.2 No. 60950-1-07 and UL 60950-1 Second Edition, Dated March 27, 2007.

REVISED NOVEMBER 21, 2011.

Tests.

The model was presented as a representative sample of the product and subjected to the test requirements of CSA C22.2 No. 60950-1-07, Second Edition, Dated March 27, 2007, UL 60950-1 Second Edition, Dated March 27, 2007 with satisfactory results under project LRE1123-2 dated November 21, 2011.

The following tests were performed as specified under project LRE1123-2 dated November 21, 2011. No further tests were considered necessary

UL60950-1/CSA-C22.2 No. 60950-1-07 CLAUSE NO.	INFORMATION
5.3.2	Locked rotor test.

The test methods and results of the above tests have been reviewed and found in compliance with the requirements in CSA C22.2 No. 60950-1-07 and UL 60950-1 Second Edition, Dated March 27, 2007.

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Critical Components Table

Component (Customer P/N)	Manufacturer	Mfg P/N	Technical Description / Ratings (electrical/other)	Mark(s) of conformity ¹
	For	For model H/S Kiosk^TM "C" and H/S Kiosk^TM "V"	H/S Kiosk™ "Υ"	
Printer Assembly	Fujitsu	FTP-639MCL354R	DC 24 V	Evaluated with end product
- DC stepping motor	Minebea Electronic Co Ltd. (NMB)	PM20L-020- FMV8	100Ω , Class A	Evaluated with end product
Cutter Assembly	Fujitsu	FTP-639CT001	DC 24 V	Evaluated with end product
	For model EZ	-Load TM , EZ-Load TM Stretch	For model EZ-Load TM , EZ-Load TM Stretch, HD-Kiosk TM "Thin Cutter"	
Paper Feeding/Cutter Assembly	Axiohm	XA/XB	DC 24 V	Evaluated with end product
		For model HD-Kiosk TM "Thick Cutter"	Chick Cutter"	
Paper Feeding/Cutter Assembly	Axiohm	TA/TB	DC 24 V	Evaluated with end product
		For model HSVL	L	
Printer mechanism	Seiko	CAP9347E-S640	24Vdc	Evaluated with end product.
		For all models		
Power Adapter	+ Globtek Inc	GT-21126-6024 (Part No: 270005-0001R)	GT-21126-6024 (Part No: Input: 100-240V~, 1.6A max, 50-60Hz 270005-0001R) Output: DC 24V, 2.5A, LPS Class I, Max. ambient 40°C	cULus (E170507)
PCB	+Various	Various	V-0, 105°C	cULus
Note: "+" preceding the n that it has an equivalent or	Note: "+" preceding the manufacturer's name denotes a Certified component that ca that it has an equivalent or better electrical rating, and the same terminal orientation.	a Certified component that c he same terminal orientation	Note: "+" preceding the manufacturer's name denotes a Certified component that can be interchanged for one from another Certified source provided that it has an equivalent or better electrical rating, and the same terminal orientation.	tified source provided

Rev Date: 02/10 QSD 153 Rev 01 Issue Date: 5/07 QPS authorizes the applicant (indicated on the Certificate of Conformity) to reproduce this report in its entirety

Photo 1 – Model H/S KioskTM "C"

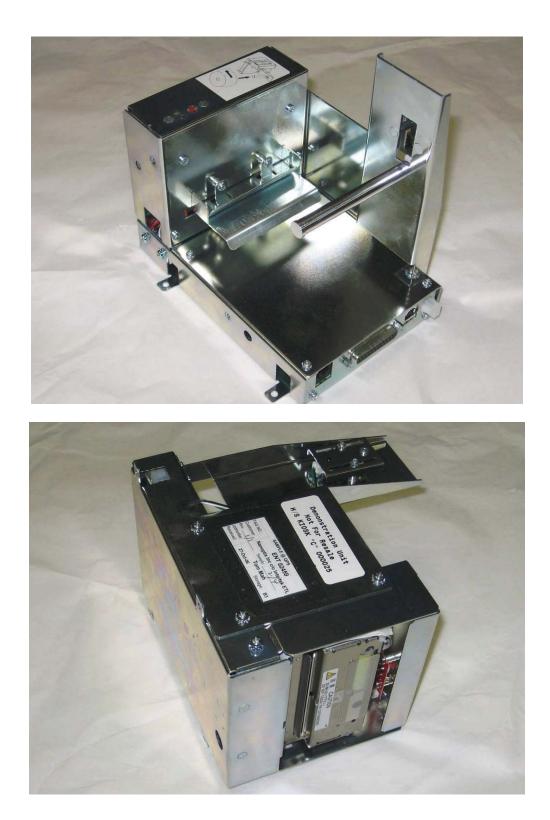


Photo 2 – Model H/S KioskTM "V"

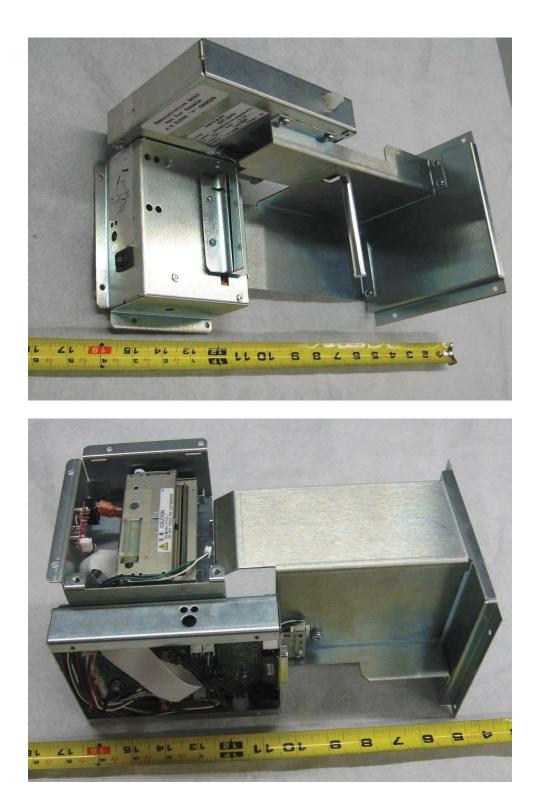


Photo 3 – Motor/Cutter Assembly (For model H/S KioskTM "C" and H/S KioskTM "V")

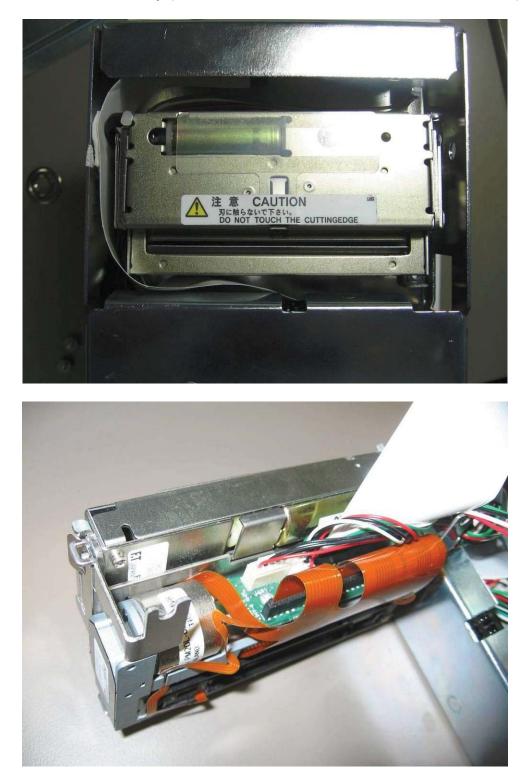
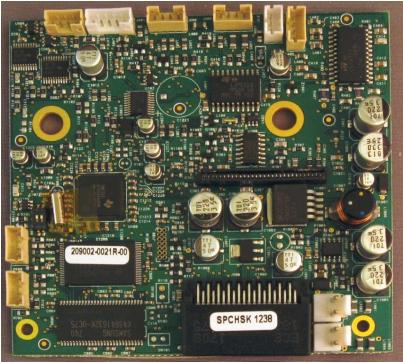


Photo 4 – Circuit board (For model H/S KioskTM "C" and H/S KioskTM "V")

Main Circuit Board:



Interface Circuit Board



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Photo 5 – Model HD-KioskTM "Thick Cutter"

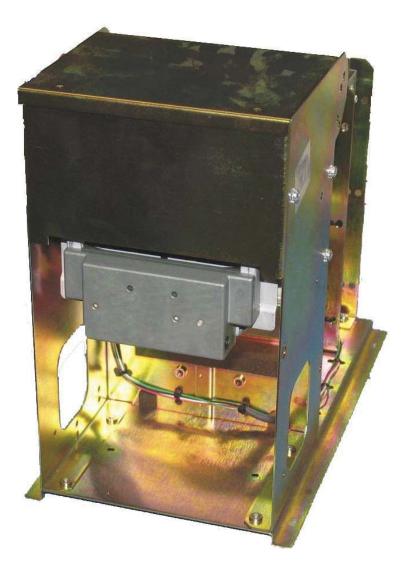


Photo 6 – Model HD-KioskTM "Thin Cutter"



Photo 7 – Model EZ-LoadTM

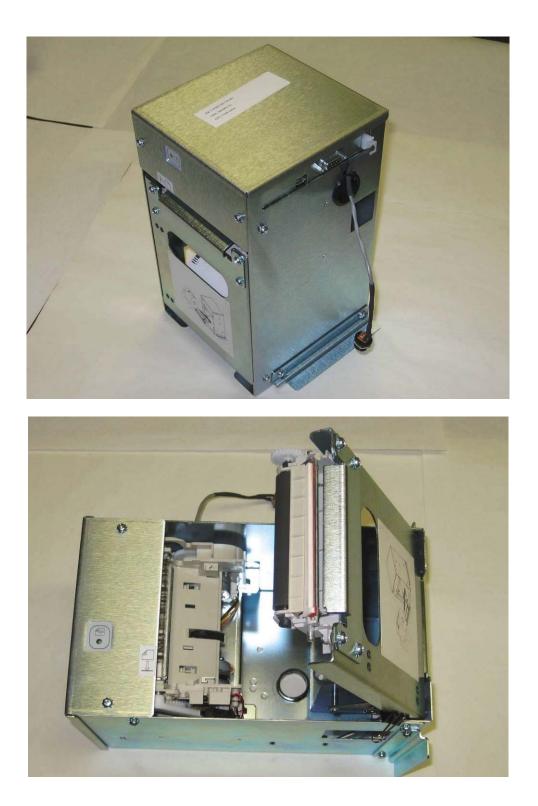


Photo 8 – Model EZ-LoadTM

Main circuit board



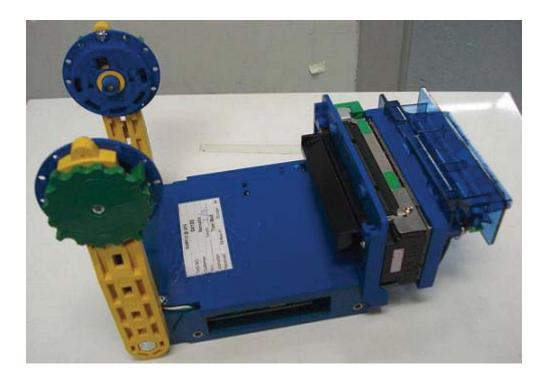
Photo 9 – Model EZ-LoadTM Stretch



Photo 10: HSVL Model No. 950100, Side and top view



Photo 11: HSVL Model No. 950100, Side and bottom view



Evaluation of Unlisted Components

Because unlisted components are uncontrolled, and they do not fall under a third party follow up program, QPS may require these components to be tested and/or evaluated at least once annually, more often for certain components, as part of the independent certification process. The unlisted components in the table below require testing and/or evaluation as indicated.

Note to QPS Follow Up Inspector: The testing laboratory will notify you in writing when these components must be selected and sent to the laboratory for re-evaluation

Ship the samples to:	QPS Evaluation Services Inc.
	81 Kelfield St. Unit 81
	Toronto Ontario
	Canada
	M9W 5A3

Sample Disposition: Due to the destructive nature of the testing, all samples will be discarded at the conclusion of testing unless, the manufacturer specifically requests the return of the samples. The request for return **must** accompany the initial component shipment.

Frequency [*] Qty ^{DD} (YES or NO) Required Action ^{***}			
) Require	None		
Send to Lab (YES or NO)			
Qty			
Frequency*			
Manufacturer Catalog No.			
Photo Component No. Description			
Photo No.			

The Unlisted Components covered by this report are shown in the following Table:

* Quarterly, semi-annual, annual.

** Note: Indicate any samples not available and provide the anticipated date that the component will be available.

*** Required Action (select one of the three): Visual

v Isual Partial Full Evaluation

Note:

Visual means the quarterly verification of the description of the unlisted component in the report is sufficient for Certification.

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