

Reliability Laboratory

TEST REPORT

 Report No.: HC30105/2012

 Page:
 1
 of
 7

 Date:
 March 26, 2012

AAEON TECHNOLOGY INC. 5F, NO. 135, LANE 235, PAO-CHIAO RD., HSIN-TIEN DIST., NEW TAIPEI CITY, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

Product Description:	Emb.Ctrl.1.6Ghz N270.Stainless.Fanless, 2COM, 2USB, VGA, LAN.DC12V
Style/ Item No.:	AEC-6511/ No.1
Manufacturer/ Vendor:	AAEON Technology Inc.
Country of Origin:	Taiwan
Quantity:	Total 1 piece
Testing Period:	Mar 23, 2012 to Mar. 26, 2012

We have tested the submitted sample(s) as requested and the following results were obtained:

<u>Test Required:</u> Test for Degrees of Protection Provided by Enclosures (IEC 60529 Edition 2.1: 2001)

IP Code	IP67
HIRST Characteristic numeral	Degrees of protection against access to hazardous parts and against solid foreign objects
Second characteristic numeral	Degrees of protection against ingress of water

Test Results:

Conclusion

Submittals sample(s) comply with the requirement and acceptance conditions of IEC 60529 Edition 2.1: 2001 Degrees of Protection Provided by Enclosures -- IP67 The detailed description of test result, please see attached sheet(s).

Signed for and on behalf of SGS TAIWAN Ltd.

Hank Chiou Asst. Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms_and_conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms_edecomment.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the alter content are appearance of the law.

> SGS Taiwan Ltd. 台灣檢驗科技股份有限公司___t

No.31, No.33, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

t (886-2) 2299-3279 f (886-2) 2299-9558



Report No.:	HC	30105/	2012
Page:	2	of	7

Reliability Laboratory

Test for Degrees of Protection Provided by Enclosures:

Name		Brand	Model	Serial No.
1.0 mm Test Wire Probe		ED&D	TRP-02	B0050180
Digital Force Gauge		ALGOL	HF-50	HF-106764
Dust Tester		T-MACHINE	TMJ-9723C	T-23-050411
IPX7/IPX8 Immersion Tank		Self-made	SGS-ETR-0201	000001
Lab Environmental Condi	tions			
Ambient temperature:	25±3°C			
Relative humidity:	<u>25_5 0</u> 55±20%RH			
Relative humany.	<u>33-2070101</u>			
Test Method/ Specification	n:			
Test method:		dition 2.1: 2001II	267	
1. Test for protection a				
Test method:		dition 2.1: 2001II		
			ameter and 100 mm lon	g is pushed agains
	or inserted th	rough any opening	s of the enclosure with	the force specified
	Table 6 in IE	C 60529 Edition 2.	1: 2001. Examine whet	her the test wire
	touches the h	azardous live parts	inside the enclosure or	not.
Test force:	<u>1 N±10 %</u>			
2. Test for protection a	gainst solid fo	reign objects:		
Test method:	<u>IEC 60529 E</u>	dition 2.1: 2001II	P6X (Dust test)	
Sample condition:	Non-Operati	ng		
Type of dust:	Talcum powe	der		
The amount of dust:	<u>2 kg</u>			
The chamber size:	1 m^3			
The maximum depression	n: <u>-20 mbar</u>			
Test duration:	8 hours			

• Examine the protection against ingress dust of specimen after this test.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對測試之樣品負責,可時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligation of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

 SGS Taiwan Ltd.
 No.31, No.33, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五准路 31 號 33 號 35 號

 台灣檢驗科技股份有限公司
 t (886-2) 2299-3279
 f (886-2) 2299-9558
 www.tw.sgs.com

Member of SGS Group



Reliability Laboratory

TEST REPORT

Report No.:	HC	30105/	2012
Page:	3	of	7

Test Method/ Specification--Continued:

3. Test for protection a	gainst water:
Test method:	IEC 60529 Edition 2.1: 2001IPX7
Test means:	Completely immerse the specimen in water in its service position as
	specified by client.
Sample condition:	Non-Operating
Test condition:	See below items marked "•",
	• The lowest point of enclosures with a height less than 850 mm is located 1000 mm below the surface of the water
	The highest point of enclosures with a height equal to or greater than 850 mm is located 150 mm below the surface of the water
Test duration:	<u>30 minutes</u>
Test device:	As shown in photo 7, 8

• Examine the protection against ingress water of specimen after this test.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對潮試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document document approval of the Company. Any unauthorized alteration, forgery or falsification of the client of the law.

No.31, No.35, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司_

t (886-2) 2299-3279 f (886-2) 2299-9558



Report No.: HC30105/2012 Page: 4 of 7

Reliability Laboratory

Specimen: Style/ Item No.: Quantity:

AEC-6511/ No.1 Total 1 piece

Test Result:

A. Degrees of protection against access to hazardous parts and against solid foreign objects (IP6X)

A-1 Test for protection against access to hazardous parts (IP6X)

Test Result	
	Style/ Item No
Check Item	AEC-6511/ No.1
1 Does the test wire penetrate any openings of the enclosure?	No
(followed check item 1) If the test wire penetrates any openings of theenclosure, does the test wire touch any hazardous live parts or any hazardous mechanical parts?	N/A
3 (followed check item 2) Does adequate clearance be kept between the test wire and hazardous live parts or hazardous mechanical parts?	N/A
Note 1: N/A means "Not Applicable". Note 2: The check items in this test report for inspecting the degree of protection provi requirements specified in IEC 60529 Edition 2.1: 2001 and in accordance with	

by client.

A-2 Test for protection against solid foreign objects (IP6X)

t (886-2) 2299-3279

Test Result	
Chask Item	Style/ Item No
Check Item	AEC-6511/ No.1
1 Does any dust deposit inside the enclosure?	No
Note 1: N/A means "Not Applicable". Note 2: The check items in this test report for inspecting the degree of protect requirements specified in IEC 60529 Edition 2.1: 2001 and in accorda by client.	

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對潮試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document document approval of the Company. Any unauthorized alteration, forgery or falsification of the client of the law.

No.31, No.33, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司

f (886-2) 2299-9558



 Report No.:
 HC30105/2012

 Page:
 5
 of
 7

Reliability Laboratory

Test Result--Continued:

B. Degree of protection against ingress of water (IPX7)

Test Result		
Check Item		Style/ Item No
		AEC-6511/ No.1
1 I	Does any water enter the enclosure?	No
	followed check item 1) If any water has entered, does the water accumulate near the cable end or live parts?	N/A
$2.1 \frac{(}{t}$	followed check item 2) Does the water be sufficient to interfere with he correct operation of the equipment or impair safety?	N/A
2.2	followed check item 2.1) Does the water deposit on insulation parts where it could lead to tracking along the creepage distances?	N/A
2.3 (r	followed check item 2.2) Does the water reach live parts or windings not designed to operate when wet?	N/A
2.3 (r		

Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.1: 2001 and in accordance with the acceptance conditions specified by client.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對潮試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document document approval of the Company. Any unauthorized alteration, forgery or falsification of the client of the law.

No.31, No.35, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司_

t (886-2) 2299-3279 f (886-2) 2299-9558

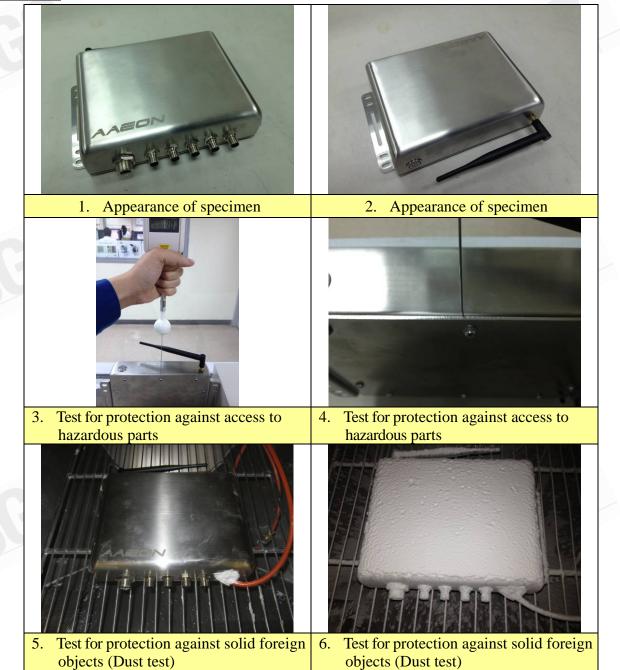


Reliability Laboratory

TEST REPORT

Report No.: HC30105/2012 of Page: 6 7

Test Photos:



Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對潮試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document document approval of the Company. Any unauthorized alteration, forgery or falsification of the client of the law. No.31, No.35, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號

SGS Taiwan Ltd. No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號 台灣檢驗科技股份有限公司。

t (886-2) 2299-3279

f (886-2) 2299-9558

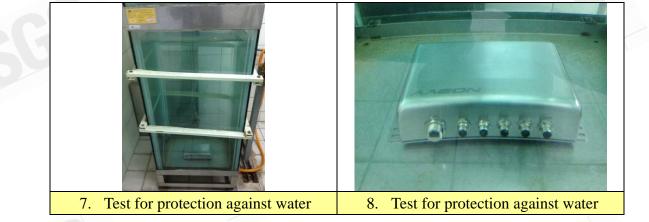
```
www.tw.sgs.com
Member of SGS Group
```



 Report No.:
 HC30105/2012

 Page:
 7
 of
 7

Test Photos--Continued:



— The End of Test Report —

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明,此報告結果僅對潮試之樣品負責,同時此樣品僅保留 90 天。本報告未經本公司書面許可,不可部份複製。 This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <u>www.sqs.com/terms and conditions.htm</u> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <u>www.sqs.com/terms - edocument.htm</u>. Attention of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document document approval of the Company. Any unauthorized alteration, forgery or falsification of the client of the law.

No.31, No.33, No.35, Wu Chyuan Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五權路 31 號, 33 號, 35 號 No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan/新北市五股區新北產業園區五工路 134 號

SGS Taiwan Ltd. 台灣檢驗科技股份有限公司_

t (886-2) 2299-3279 f (886

f (886-2) 2299-9558