

## TEST REPORT

Report No.: HC60031/2016

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Date: June 6, 2016

VECOW CO., LTD.

12 F, NO. 111, ZHONGCHENG RD.,

TUCHENG DIST., NEW TAIPEI CITY,

TAIWAN, R.O.C.

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

Product Description: Expandable Fanless System

Style/ Item No.: ECS-7110/ No.1

Quantity: Total 1 set

Testing Period: Jun. 3, 2016 to Jun. 4, 2016

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

Test Required: (According to client's test specification, please see following sheets in detail.)

1. Random Vibration Test
2. Mechanical Shock Test

Test Results: – PLEASE SEE ATTACHED SHEETS –

Signed for and on behalf of  
SGS TAIWAN Ltd.



Winson Tseng  
Asst. Manager

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## 1. Random Vibration Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Vibration Test System	King Design	EM-800F2K-50N120	RU104080389
Controller	Dactron	COMET 200	10539718
Control Accelerometer	PCB	353B34	139174
Vibration Tester	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Controller	Dactron	LASER	7110357
Control Accelerometer	PCB	353B34	143549

### Lab Environmental Conditions:

Ambient temperature:  $(25 \pm 3) ^\circ\text{C}$

Ambient humidity:  $(55 \pm 20) \% \text{RH}$

### Test Method/ Specification:

Test Method: IEC 60068-2-64, Edition 2.0:2008 and client's request

Sample condition: Operating (execute Burn-In Test)

Wave form: Random

Frequency: (5 ~ 500) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD ( $\text{G}^2/\text{Hz}$ )	Right Slope (dB/Oct.)
5	-	0.05	0
500	0	0.05	-

⇨ equivalent to 5.0 Grms

Direction: X, Y, Z axes (see photo 3 ~ 5)

Duration: 30 minutes/ axis

- Examine the appearance of specimen(s) by visual check and perform functional check after this test
- Functional check: Turn on the power of specimen then execute test program "Burn-In Test" while performing functional check.

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**Specimen:**

Style/ Item No.: ECS-7110/ No.1

Quantity: Total 1 set

**Test Result:**

Style/ Item No.	Check Item	Appearance check (Visual check)	Functional check
<b>ECS-7110/ No.1</b>		No visible damage	Normal

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## 2. Mechanical Shock Test:

### Test Equipment:

Name	Brand	Model	Serial No.
Shock Testing System	LANSMONT	65-81 TTSII	M-13418
Data Acquisition and Analysis System	LANSMONT	103570-2-B	0503-73
ICP Accelerometer	PCB	353B14	79712

### Lab Environmental Conditions:

Ambient temperature:  $(25 \pm 3) ^\circ\text{C}$

Ambient humidity:  $(55 \pm 20) \% \text{RH}$

### Test Method/ Specification:

Test Method: IEC 60068-2-27, Edition 4.0:2008 and client's request

Specimen Condition: Operating (execute Burn-In Test)

Pulse shape: Half-sine

Acceleration: 50 G

Velocity Change: 11 ms

Shock direction: 6 faces ( $\pm X$ ,  $\pm Y$ ,  $\pm Z$  axes, see photo 6 ~ 11)

No. of shock: 3 shocks/ face (total 18 shocks)

- Examine the appearance of specimen(s) by visual check and perform functional check after this test
- Functional check: Turn on the power of specimen then execute test program "Burn-In Test" while performing functional check.

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**Specimen:**

Style/ Item No.: ECS-7110/ No.1







Quantity: Total 1 set

**Test Result:**

Style/ Item No.	Check Item	Appearance check (Visual check)	Functional check
<b>ECS-7110/ No.1</b>		No visible damage	Normal

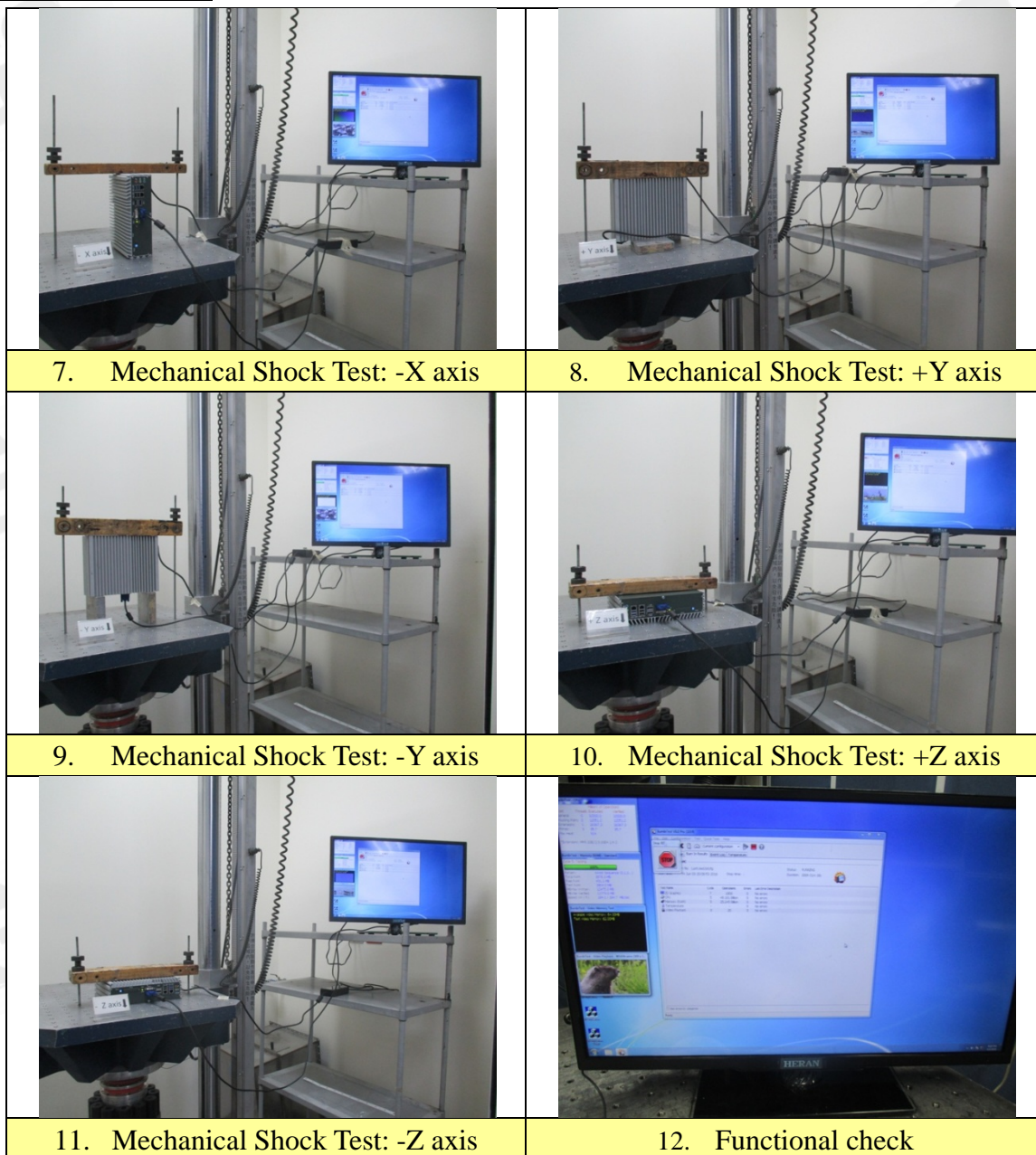
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Test Photos:

	
<p>1. Appearance of specimen</p>	<p>2. Appearance of specimen</p>
	
<p>3. Random Vibration Test: X axis</p>	<p>4. Random Vibration Test: Y axis</p>
	
<p>5. Random Vibration Test: Z axis</p>	<p>6. Mechanical Shock Test: +X axis</p>

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Test Photos--Continued:



— — —The End of Test Report — — —

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