

TEST REPORT

Report No.: HCD0147/2018
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Date: December 28, 2018

VECOW CO., LTD.
3 F., NO. 10, JIANKANG RD.,
ZHONGHE DIST., NEW TAIPEI CITY,
TAIWAN, R.O.C.

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

Product Description: High-Performance Fanless System
Style/ Item No.: ECX-1000-PoER/ No.1
Quantity: Total 1 set
Testing Period: Dec. 25, 2018 to Dec. 26, 2018
Note: System Configuration of Equipment under measurement:
CPU:
Intel(R) Core(TW):i7-8700T CPU@2.40 GHz
DDR:
SLINK DDR4 4G 2666 SODIMM IT *2
Storage:
Innodisk CFast 3ME3 64GB

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.



Hank Chiou
Supervisor

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1. Random Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration Tester	King Design	EM-5000F2K-75N600	10923742
Controller	Crystal	spider	1001664
Control Accelerometer	WR	793-6	A4632

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

Sample condition: Operating (execute "BurnIn Test")

Wave form: Random

Frequency: (5 ~ 500) Hz

Frequency (Hz)	Left Slope (dB/Oct.)	PSD (g^2/Hz)	Right Slope (dB/Oct.)
5	—	0.05	0
500	0	0.05	—
⇨ equivalent to 5.0 G_{rms}			

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 examine the test program "BurnIn Test" could work normally or not.

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Specimen:

Style/ Item No.: ECX-1000-PoER/ No.1

Quantity: Total 1 set

Test Result:

<div style="text-align: right;">Check Item</div> <div style="text-align: left;">Style/ Item No.</div>	Appearance check (Visual check)	Functional check
ECX-1000-PoER/ No.1	No visible damage	Normal

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2. Mechanical Shock Test:

Test Equipment:

Name	Brand	Model	Serial No.
Shock Test System	LANSMONT	65-81 TTSII	M-13418
Data Acquisition & Analysis System	LANSMONT	103570-2-B	0503-73
ICP Accelerometer	PCB	353B14	79347

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

Sample condition: Operating (execute "BurnIn Test")

Pulse shape: Half-sine

Acceleration: 50 g

Pulse duration: 11 ms

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

No. of shock: 3 shocks/ axis (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 examine the test program "BurnIn Test" could work normally or not.

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Specimen:

Style/ Item No.: ECX-1000-PoER/ No.1





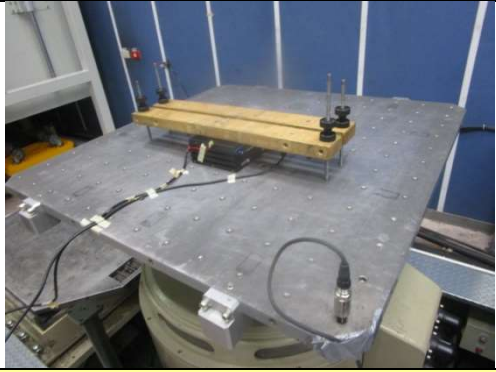
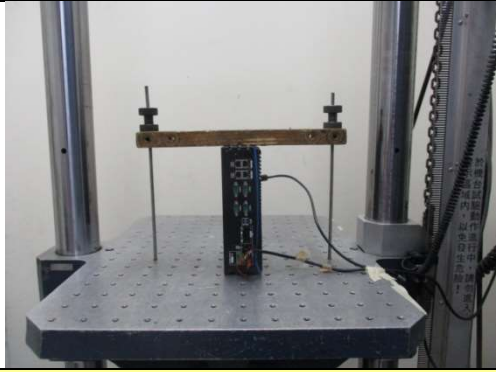
Quantity: Total 1 set

Test Result:

Check Item Style/ Item No.	Appearance check (Visual check)	Functional check
ECX-1000-PoER/ No.1	No visible damage	Normal

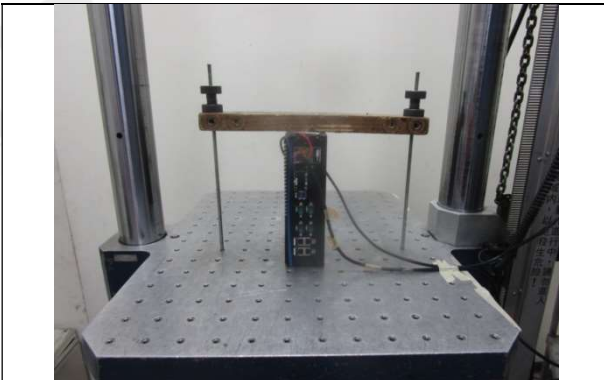
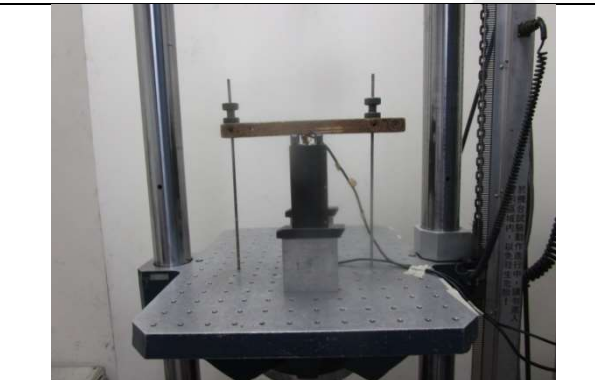
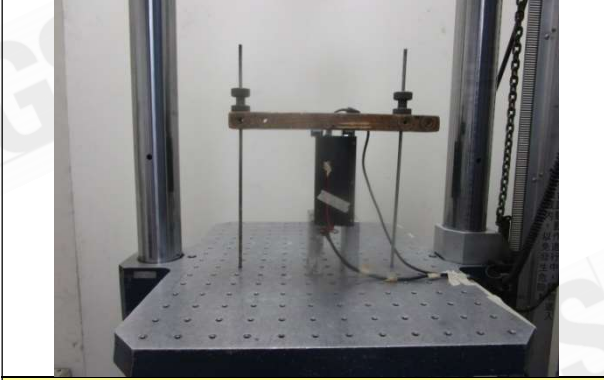


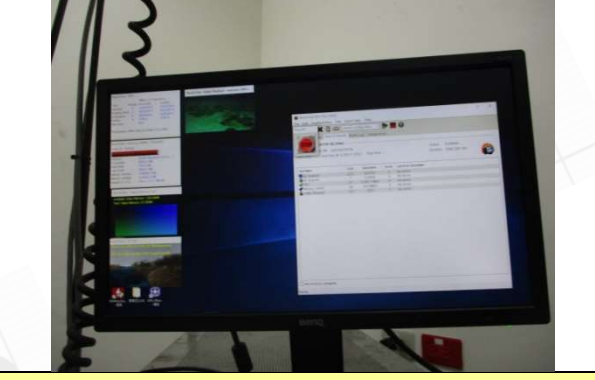
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Test Photos:

	
1. Appearance of specimen	2. Appearance of specimen
	
3. Random Vibration Test: X axis	4. Random Vibration Test: Y axis
	
5. Random Vibration Test: Z axis	6. Mechanical Shock Test (+X axis)

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Test Photos--Continued:

	
7. Mechanical Shock Test (-X axis)	8. Mechanical Shock Test (+Y axis)
	
9. Mechanical Shock Test (-Y axis)	10. Mechanical Shock Test (+Z axis)
	
11. Mechanical Shock Test (-Z axis)	12. Functional check

— — — The End of Test Report — — —

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