



Reliability Laboratory

TEST REPORT

Report No.: HC30037A/2013

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Date: June 26, 2013

ALLTEK MARINE ELECTRONICS CORP.

7F, NO. 605, RUEI GUANG RD.,

NEIHU, TAIPEI, R.O.C.

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

Product Description: AIS Class B Transponder
Style/ Item No.: CAMINO-108/ No. 1
Manufacturer/ Vendor: AMEC
Quantity: Total 1 set
Country of Origin: Taiwan
Testing Period: Mar. 29, 2013 to Apr. 1, 2013
Note: Hardware: M-PCB-B108MBV1;
Software: V1.2.6

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. Vibration Test

Test Results: -PLEASE SEE ATTACHED SHEETS-

* HC30037/2013, dated on April 15, 2013, is hereby canceled and replaced by HC30037A/2013.

Signed for and on behalf of
SGS TAIWAN Ltd.

Winson Tseng
Asst. Manager

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1. Vibration Test:

Test Equipment:

Name	Brand	Model	Serial No.
Vibration Test System	UNHOLTZ-DICKIE	SAI60-H560BAC/2/ST	474
Controller	Dactron	LASER	7110357
Control Accelerometer	PCB	353B34	143549
Accelerometer	PCB	356A24	90696

Lab Environmental Conditions:Ambient temperature: $(25 \pm 3) ^\circ\text{C}$ Ambient humidity: $(55 \pm 20) \% \text{ RH}$ Test Method/ Specification:**1. Resonance Search:**Test method: Reference to IEC 62287-1 Edition 2.0: 2010, Section 9.2Sample condition: OperatingWave form: SinusoidalFrequency: (2~100) Hz

Frequency (Hz)	Displacement: D_{p-p} (mm)	Velocity (m/s)	Acceleration (m/s^2)
2	2	-	-
13.3	2	-	7
100	-	-	7

Sweep Rate: 0.2 octave/ minuteDirection: X, Y, Z axes (See photo 3 ~ 5)Test duration: 2 sweeps/ axisMeasuring Position: as shown in photo 2

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Test Method/ Specification--Continued:**2. Dwell Vibration test:**Sample condition: OperatingFrequency: Frequency of major peaks where the magnitude ratio ≥ 5 (if it appears) during Resonance Search in each direction. If no resonance frequency found, dwell at 30 Hz.Acceleration: Same condition as specified in resonance search.Dwell: 2 hours/ peak

- Examine the appearance of specimen(s) by visual check and perform functional check during and after this test.
- Functional check: Connect the specimen with computer then examine the navigation function of specimen could be work normally or not.

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Specimen:Style/ Item No.: CAMINO-108/No.1Quantity: Total 1 setTest Result:

1. Resonance Search Result:

Style/ Item No.	Test Item	Major Resonance Frequency
		Unit: Hz
CAMINO-108/No.1	X axis	No resonance found
	Y axis	No resonance found
	Z axis	No resonance found

2. Examination of produce (Appearance check and functional check):

Check Item	Appearance check (Visual check)	Functional Check
Style/ Item No.		
CAMINO-108/No.1	No visible damage	Normal

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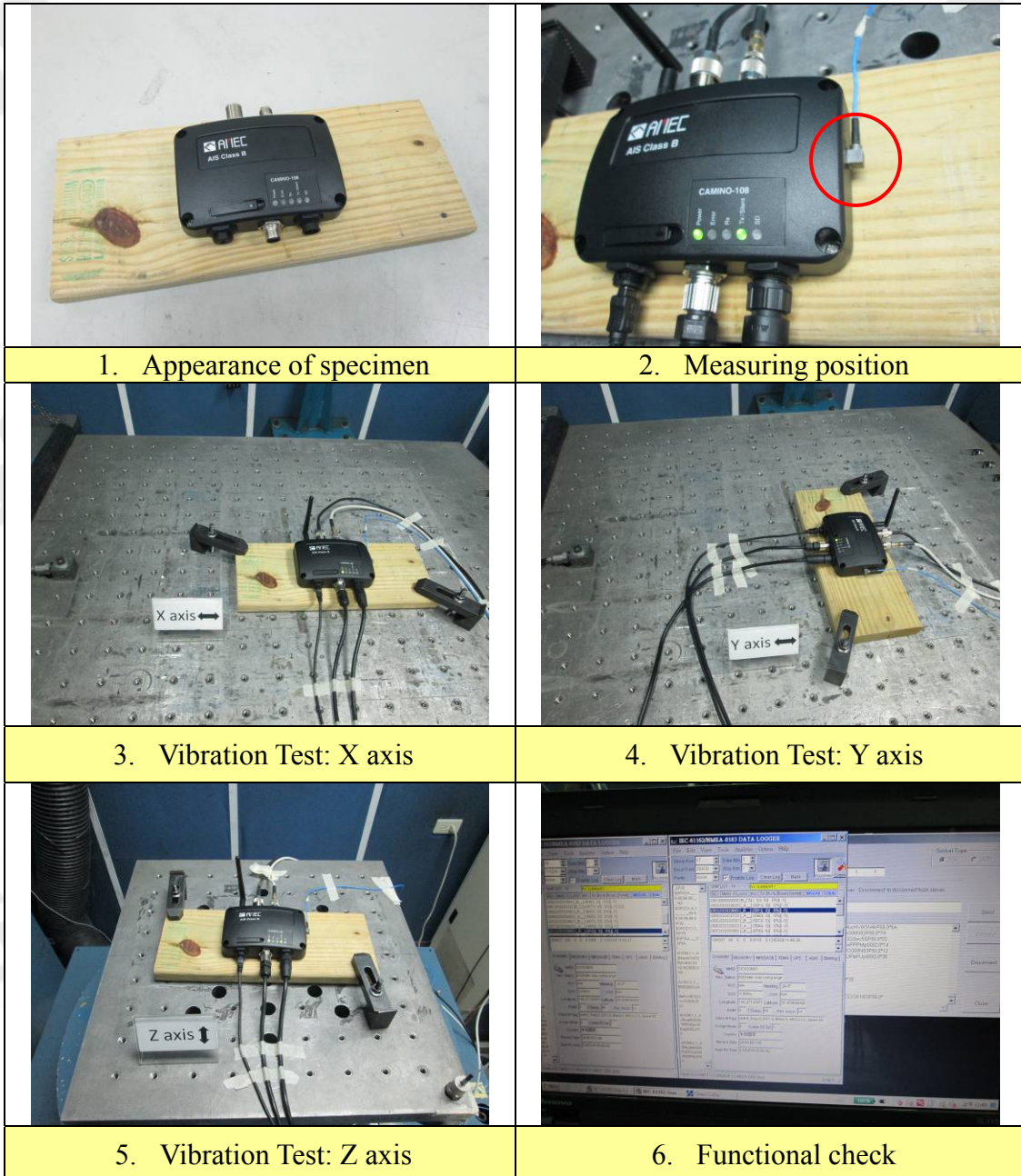
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Test Photos:



1. Appearance of specimen

2. Measuring position

3. Vibration Test: X axis

4. Vibration Test: Y axis

5. Vibration Test: Z axis

6. Functional check

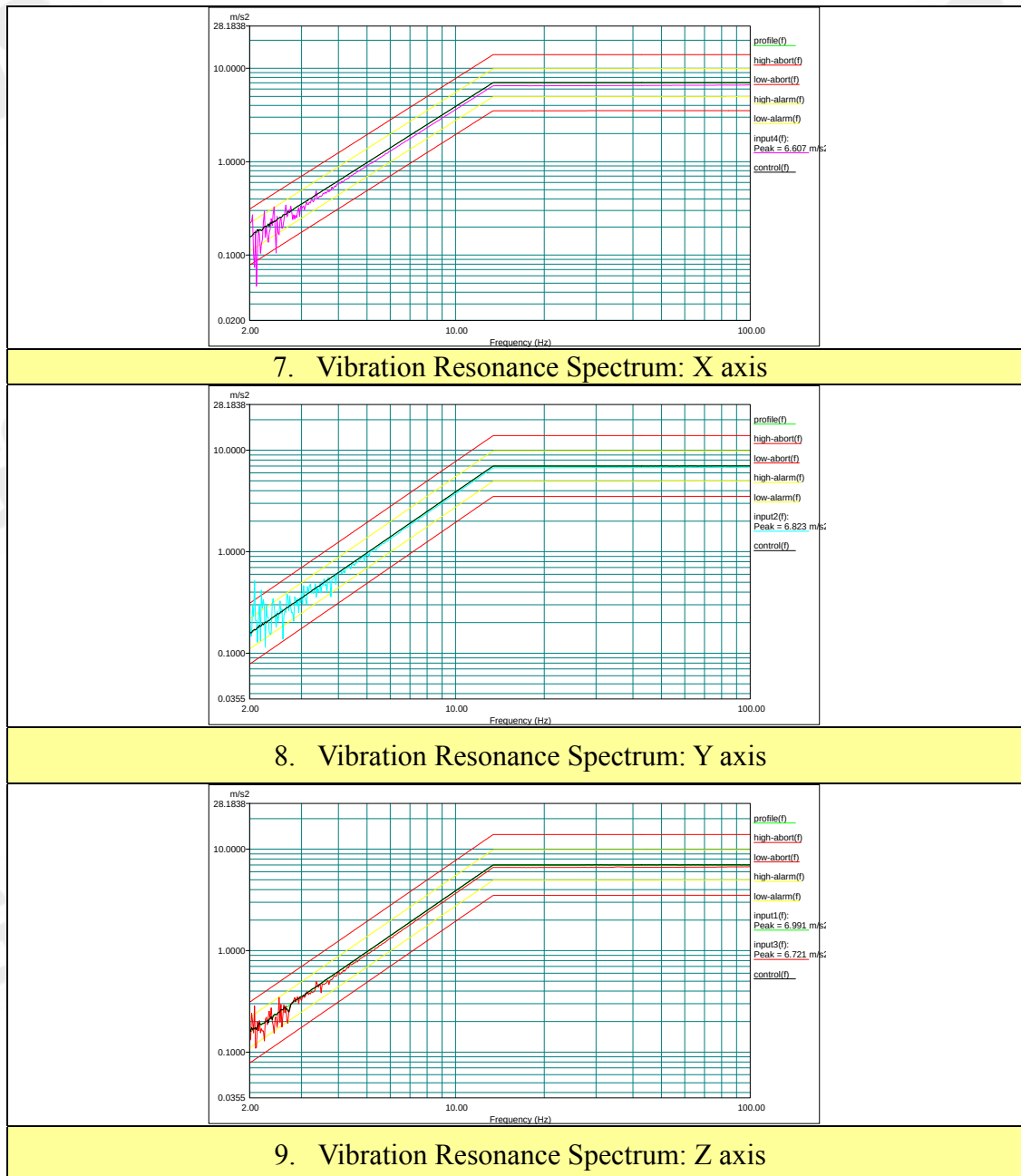
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Test Photos--Continued:



— — —The End of Test Report — — —

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