



Reliability Laboratory

TEST REPORT



Report No.: HH40002A/2017

Page: 1 of 4

Date: April 25, 2017

ALLTEK MARINE ELECTRONICS CORP.
14F-2, NO. 237, SEC. 1, DATONG RD., XIZHI DISTRICT,
NEW TAIPEI CITY, TAIWAN, R.O.C.

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

Product Description: GPS Antenna
Style/ Item No.: GA-22/ No.1
Manufacturer/ Vendor: Alltek Marine Electronics Corp.
Country of Origin: Taiwan
Quantity: Total 1 piece
Testing Period: Apr. 21, 2017

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

Test Required:

Test for Degrees of Protection Provided by Enclosures (IEC 60529 Edition 2.2: 2013)

IP Code	IPX6
First characteristic numeral	Omitted
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 2.2: 2013 Degrees of Protection Provided by Enclosures -- IPX6 The detailed description of test result, please see attached sheet(s).

Signed for and on behalf of
SGS TAIWAN Ltd.

Hank Chiou
Supervisor

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TEST REPORTReport No.: HH40002A/2017
Page: 2 of 4Test for Degrees of Protection Provided by Enclosures:Test Equipment:

Name	Brand	Model	Serial No.
IPX6 Water Jet Hose Nozzle Set	PTL	P03.28	5040045

Lab Environmental Conditions:Ambient temperature: (25 ± 3) °CAmbient humidity: (55 ± 20) % RHTest Method/ Specification:Test method: IEC 60529 Edition 2.2: 2013 --IPX6Sample condition: Operating (GPS 3D fixed function)Internal diameter
of the nozzle: 12.5 mmDelivery rate: 100 ℓ/minute ±5%Distance from nozzle
to enclosure surface: between 2.5 m and 3 mCore of the substantial
stream: circle of approximately 120 mm diameter at 2.5 m distance from nozzleTest duration: Total 30 minutes

- Examine the protection against ingress water of specimen(s) and perform functional check after this test.
- Functional check: Examine whether the GPS 3D fixed or not.

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TEST REPORT

Report No.: HH40002A/2017

Page: 3 of 4

Specimen:

Style/ Item No.: GA-22/ No.1
 Quantity: Total 1 piece

Test Result:

Degree of protection against ingress of water (IPX6)

Test Result		Style/ Item No.
Check Item		GA-22/ No.1
1	Does any water enter the enclosure?	No
2	(followed check item 1) If any water has entered, does the water accumulate near the cable end or live parts?	N/A
2.1	(followed check item 2) Does the water be sufficient to interfere with the 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	(followed check item 2.2) Does the water reach live parts or windings not designed to operate when wet?	N/A
3	Functional Check	Normal

Note 1: N/A means "Not Applicable".

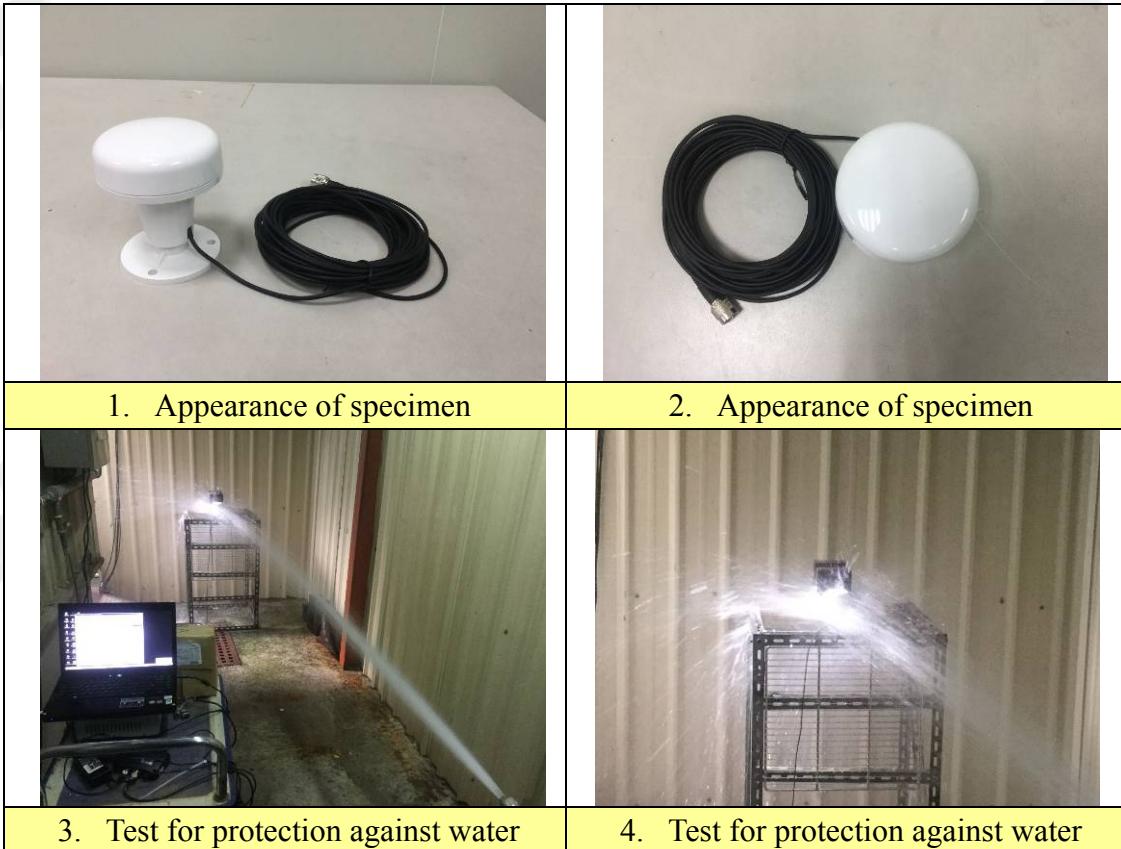
Note 2: The check items in this test report for inspecting the degree of protection provided by enclosures are reference to the requirements specified in IEC 60529 Edition 2.2: 2013 and in accordance with the acceptance conditions specified by client.

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TEST REPORT

Report No.: HH40002A/2017

Page: 4 of 4

Test Photos:

— — — The End of Test Report — — —

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