

Test Report

Verified code:843654

Report No.:H201904168357-02EN

Customer: Airgain DBA Antenna Plus

Address: No.151, MaoZhu Shan Village, Qiaoli Administration, ChangPing, DongGuan, GuangDong, China. Post Code: 523586

Sample description: Double Cell and Wi-Fi Antenna with GNSS

Sample model: AP-M2M2-CCWWG-Q-S22222-RP34-BL

Reference document: IEC 60529-2013

Receive sample date: Apr. 23, 2019

Test date: Apr. 25, 2019

Test result: Meet the requirement

Prepared		Reviewed		Approved	
by	<u>Kuang Chang Fu</u>	by	<u>ZhaoJiahua</u>	by	<u>BobChen</u>

(Engineer)	<u>kuangchangfu</u>	(Deputy Director)	<u>zhao jia hua</u>	(Deputy Manager)	<u>[Signature]</u>
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GUANGZHOU GRG METROLOGY & TEST CO., LTD

Issued Date: 2019/4/26

APPROVED(04)

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Statement

1. The report is invalid without "special stamp for inspection and testing".
2. Failure to affix "special seal for inspection and testing" to the copy report is invalid, and some copies are invalid.
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6. This test is only responsible for incoming samples, and the report is only valid for this test.

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Test source	<input checked="" type="checkbox"/> Commissioning test <input type="checkbox"/> Type test <input type="checkbox"/> Finalization test <input type="checkbox"/> Mandatory test <input type="checkbox"/> PV <input type="checkbox"/> DV <input type="checkbox"/> Others			
Sample source	<input checked="" type="checkbox"/> Commissioned units send sample <input type="checkbox"/> Others:			
Sample	Model	Quantity	Sample No.	Test No.
Double Cell and Wi-Fi Antenna with GNSS	AP-M2M2-CCW WG-Q-S22222-R P34-BL	2PCS	/	H201904168357-3# H201904168357-4#
Appearance of sample	Shape: <input type="checkbox"/> Square <input type="checkbox"/> Round <input type="checkbox"/> Irregular <input checked="" type="checkbox"/> Others _____ Color: <input type="checkbox"/> Monochrome <input type="checkbox"/> Multicolor _____ <input checked="" type="checkbox"/> Others _____ Type: <input type="checkbox"/> Mini <input checked="" type="checkbox"/> Small <input type="checkbox"/> Small and medium <input type="checkbox"/> Medium <input type="checkbox"/> Large			
Sample components and accessories	Components: / Accessories: /			
Packing status	<input type="checkbox"/> Outer Packing _____ <input checked="" type="checkbox"/> No packing			
Sample quality before test	<input checked="" type="checkbox"/> Conformity product <input type="checkbox"/> Non-conformity product <input type="checkbox"/> Prototype <input type="checkbox"/> Others			
Abnormal condition of sample before test	/			
Environment condition	Temperature: 26.3℃~29.9℃ Relative humidity: 47%~59%			
Test address	163 Pingyun Rd., West of Huangpu Ave., Guangzhou(510656)			

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1. IP6X

1.1 Test condition

1.1.1 Test standard: IEC 60529-2013;

1.1.2 Probe test: Samples were metal proofed using a 1.0 mm diameter metal probe;

1.1.3 IP6X test conditions: The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50 μ m and the nominal width of a gap between wires 75 μ m. The amount of talcum powder to be used is 2kg per cubic metre of the test chamber volume.

It shall not have been used for more than 20 tests. The duration of the test is 8h.

1.2 Sample information

Sample information is shown in Table 1-1.

Table 1-1 Sample information

Sample name	Model	Quantity	Test No.
Double Cell and Wi-Fi Antenna with GNSS	AP-M2M2-CCWWG-Q-S22222-RP34-BL	1PCS	H201904168357-3#

1.3 Test requirements

1.3.1 Test standard: IEC 60529-2013;

1.3.2 Probe test: A 1.0 mm diameter probe should not pass through the opening;

1.3.2 Visual inspection: After the test, no deposit of dust should be observable inside the enclosure.

1.4 Test result

The test results are shown in Table 1-2.

Table 1-2 Test result

Sample name	Test No.	Visual inspection	Conclusion
Double Cell and Wi-Fi Antenna with GNSS	H201904168357-3#	A 1.0 mm diameter probe can't pass through the opening. After the test, there was no deposit of dust inside the sample.	Meet the requirements

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1.5 Test photos



Fig.1-1 Pretest sample



Fig.1-2 Post-test sample

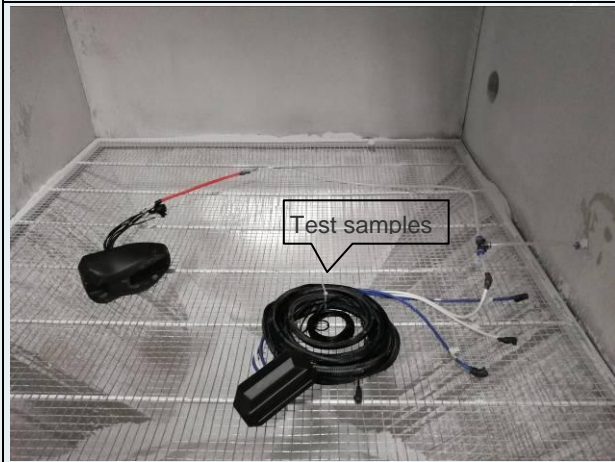


Fig.1-3 IP6X (1)

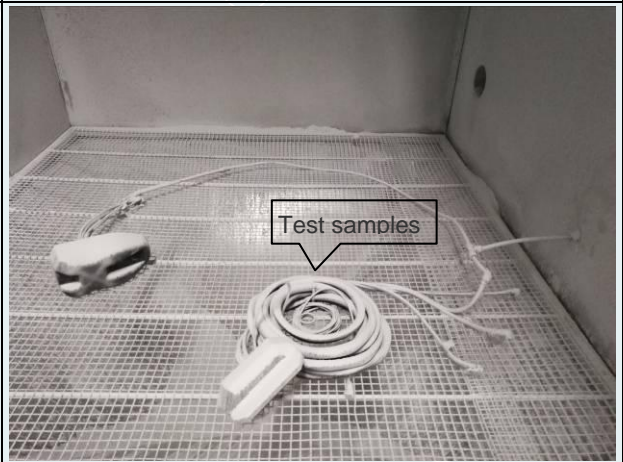


Fig.1-4 IP6X (2)



Fig.1-5 Probe test



Fig.1-6 Post-test inspection

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2. IPX6

2.1 Test condition

2.1.1 Test standard: IEC 60529-2013;

2.1.2 Internal diameter of nozzle: 12.5mm;

2.1.3 Delivery rate: 100L/min±5%;

2.1.4 Test duration: approximately 3min;

2.1.5 Distance form nozzle to be the equipment surface: 2.5m~3m.

2.2 Sample information

Sample information is shown in Table 2-1.

Table 2-1 Sample information

Sample name	Model	Quantity	Test No.
Double Cell and Wi-Fi Antenna with GNSS	AP-M2M2-CCWWG-Q-S22222-RP34-BL	1PCS	H201904168357-4#

2.3 Test requirements

2.3.1 Test standard: IEC 60529-2013;

2.3.2 Visual inspection: After the test, there should be no water into the one sample.

2.4 Test result

The test results are shown in Table 2-2.

Table 2-2 Test result

Sample name	Test No.	Visual inspection	Conclusion
Double Cell and Wi-Fi Antenna with GNSS	H201904168357-4#	After the test, no water was found into the sample.	Meet the requirements

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2.5 Test photos



Fig.2-1 Pretest sample



Fig.2-2 Post-test sample



Fig.2-3 IPX6



Fig.2-4 Post-test inspection

3. Test equipments

List of instruments for testing equipment				
No.	Testing item	Equipment	Serial No.	Calibration valid date
1	IP6X	Dust chamber	180258	2019-03-07~2020-03-06
		IP4X probe	JLX2016G101350	2018-06-13~2019-06-12
2	IPX6	Spray Nozzle	SH5080408	2019-03-26~2020-03-25

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