

## TEST REPORT

Product: Android Data Collector  
Item No.: HCE3XX series (X: 0-9 or A-Z)  
Rating: 5Vd.c.; 1,0A  
Applicant: Shanghai Huace Navigation Technology Ltd.  
Address: Building C, 599 Gaojing Road, Qingpu District, Shanghai 201702, P.R.China  
Manufacturer: Shanghai Huace Navigation Technology Ltd.  
Factory: Shanghai Huace Navigation Technology Ltd.  
Address: Building C, 599 Gaojing Road, Qingpu District, Shanghai 201702, P.R.China  
Testing Laboratory: SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.  
Address: 588 West Jindu Road, Xinqiao Town, Songjiang, 201612 Shanghai, China  
Number of Samples received: 2  
Date of samples reception: 2016-11-09  
Date Test Conducted: 2016-11-09 to 2016-11-18  
Test Requested: IP68 test  
Test Method (standards): According to client's requirement and refer to IEC 60529:1989 + A1:1999 +A2:2013 / EN 60529:1991 + A1:2000 +A2:2013 clause 13.6 & 14.2.8

Test result:

Pass

**CONCLUSION:** The submitted sample comply with the requirements of IP68

Prepared and checked by:

Reviewed by:

  
Bruce Wu

  
Lancer Lei

**Summary of testing:**

Tests are performed on model HCE300.

**TEST RESULTS**

**Standards used** IEC 60529:1989 + A1: 1999 +A2: 2013 / EN 60529: 1191 + A1: 2000 +A2: 2013

Clause	Requirement + Test	Result – Remark	Verdict
13.6	IP6X Test	There is no dust inside the enclosures at the end of the test.	Pass
14.2.8	IPX8 Test	The water traces were not found inside enclosures at the end of the test.	Pass

**TEST CONDITION:**

**IP6X Test**

1	Test means	2 Kg/m <sup>3</sup> chamber volume kept in suspension during the test. The pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump. The depression didn't exceed 2kPa on the manometer. Extraction rate of 40 to 60 volumes per hour is obtained.
2	Duration of Test	8 hours

**IPX8 Test**

1	Test means	a) The lowest point of enclosures with a height less than 850 mm is located 2000 mm below the surface of the water; b) The duration of the test is 1 hour; d) The water temperature does not differ from that of the equipment by more than 5 K. However, a modified requirement may be specified in the relevant product standard if the tests are to be made when the equipment is energized and/or its parts in motion.
2	Duration of Test	1 hour

**OBSERVATIONS:**

**There is no dust inside the enclosures at the end of IP6X test.**  
**The water traces were not found inside enclosures at the end of IPX8 test.**

**Photos of the product:**



**General View**



**General view of IP6X test**



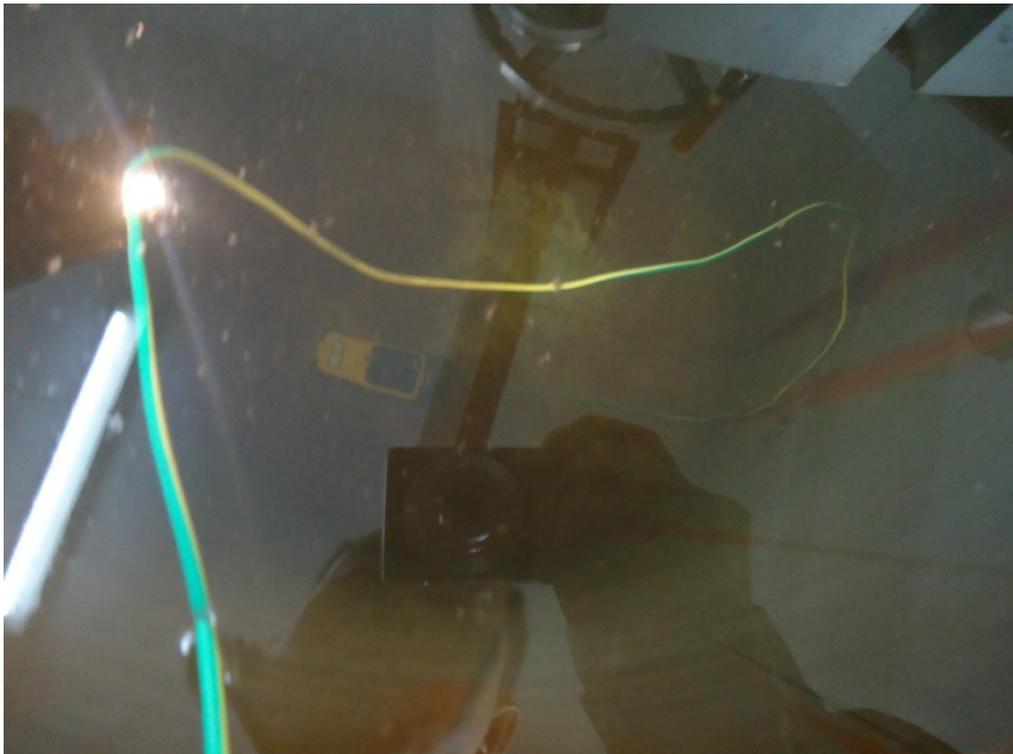
Open view after IP6X test



Open view after IP6X test



**Open view after IP6X test**



**General view of IPX8 test**

