

# Test Report

Verified Code:689195

Report No.:H20240903144001-06EN

Customer: ProTech CO., Ltd

Address: No. 18, Baoying Road, Dawang High-Tech District, Zhaoqing, Guangdong

Sample Name: Sinora Hard Shell Case

Sample Model: SIN-04640-29BK-E

Receive  
Sample Date: Sept. 12, 2024

Test Date: Sept. 19, 2024~Sept. 30, 2024

Reference  
Document: ISO 20653: 2013

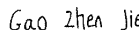
Test Result: Meet the requirements

Prepared by



Wang Xin

Reviewed by



Gao Zhenjie

Approved by



Zhang Hua Ming

GRG METROLOGY &amp; TEST GROUP CO., LTD.

Issued Date: 2024/10/30

GRG METROLOGY &amp; TEST GROUP CO., LTD.

Address: No.163, Pingyun Road, West of Huangpu Avenue, Guangzhou, Guangdong, China

Tel: (+86) 400-602-0999 FAX: (+86) 020-38698685 Web: <http://www.grgtest.com>

H20240903144001-06EN



## Statement

1. The report is invalid without "special seal for inspection and testing"; some copies are invalid; The report is invalid if it is altered or missing; The report is invalid without the signature of the person who prepared, reviewed and approved it.
2. The sample information is provided by the client and responsible for its authenticity; The content of the report is only valid for the samples sent this time.
3. When there are reports in both Chinese and English, the Chinese version will prevail when the language problems are inconsistent.
4. If there is any objection concerning the report, please inform us within 15 days from the date of receiving the report.
5. The test report only used for scientific research, teaching, internal quality control and other purposes.



## 1 IP6X Test

### 1.1 Test Condition

According to ISO 20653: 2013.

1.1.1 Before test, perform visual check for samples.

1.1.2 Test conditions of IP6X Test as follows.

1.1.2.1 Anti-touch protection level: Probe the shell of the test article with a metal wire of 1.0mm in diameter with a force of  $1N \pm 0.1N$ ;

1.1.2.2 Anti-foreign object protection level: place the test item in the test box and test it according to the conditions in Table 1-1.

1.1.3 After test, perform visual check and function check for samples.

**Table 1-1 IP6X test conditions**

Tust Dust	Dust dosage	Test time
Arizona Powder	2kg/m <sup>3</sup>	Take 6s dust raising, 15min static as a cycle, run 20 cycles

### 1.2 Sample Information

Sample information is shown in Table 1-2.

**Table 1-2 Sample Information**

Sample Name	Model	Quantity	Test No.
Sinora Hard Shell Case	SIN-04640-29BK-E	1pc	H202409031440-0008

### 1.3 Test Requirements

According to ISO 20653: 2013.

1 mm metal probe shall not enter the shell of the test article and no dust shall penetrate into the interior of the test article after the test.

**1.4 Test Result**

The test result is shown in Table 1-3.

**Table 1-3 Test Result**

Test No.	Test Result	Conclusion
H202409031440-0008	The 1mm diameter detection line did not enter the shell of the test article, and no dust entered the interior of the test article after the test.	Meet the requirements

**1.5 Test Photos**

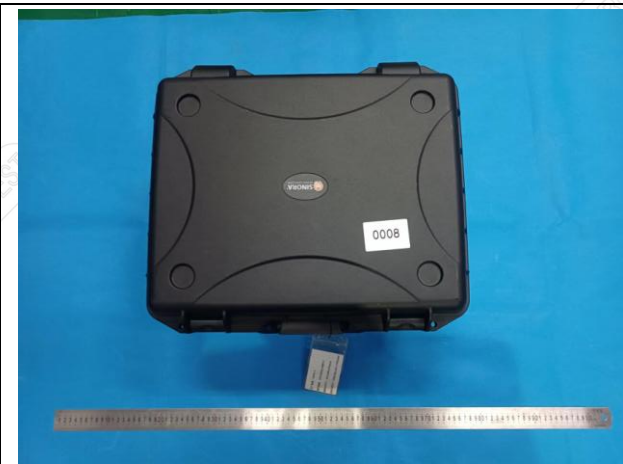


Fig.1-1 Sample before test



Fig.1-2 Unpacking and inspection after test



Fig.1-3 Pre-test metal probe inspection



Fig.1-4 Test set-up diagram

## 2 IPX7 Test

### 2.1 Test Condition

According to ISO 20653: 2013.

2.1.1 Before test, perform visual check for samples.

2.1.2 Test method: fix the test article in the immersion pool and conduct the test according to the conditions in Table 2-1;

2.1.3 After test, perform visual check and function check for samples.

**Table 2-1 IPX7 test conditions**

Distance between the highest point of the box and the water surface	Test time
1000mm	30min

### 2.2 Sample Information

Sample information is shown in Table 2-2.

**Table 2-2 Sample Information**

Sample Name	Model	Quantity	Test No.
Sinora Hard Shell Case	SIN-04640-29BK-E	1pc	H202409031440-0008

### 2.3 Test Requirements

According to ISO 20653: 2013.

The test article is temporarily immersed in water; water must not penetrate in such a way as to cause adverse effects.

### 2.4 Test Result



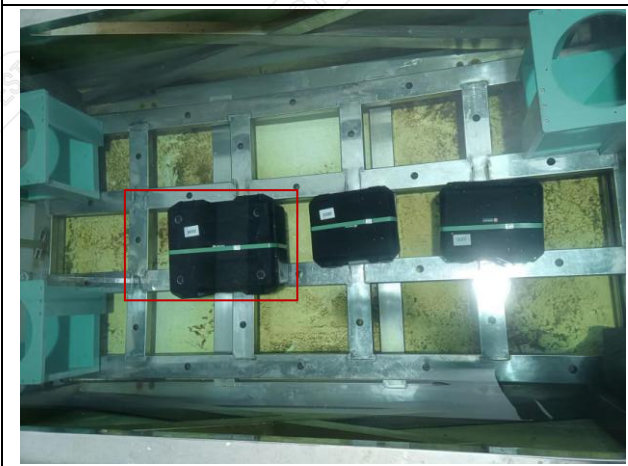
The test result is shown in Table 2-3.

**Table 2-3 Test Result**

Test No.	Test Result	Conclusion
H202409031440-0008	No water ingress inside the sample after the test.	Meet the requirements



2.5 Test Photos

	
<p>Fig.2-1 Sample before test</p>	<p>Fig.2-2 Unpacking and inspection after test</p>
	<p>/</p>
<p>Fig.2-3 Test set-up diagram</p>	<p>/</p>

### 3 Test Instrument & Equipment

List of Instrument for Testing Equipment					
No.	Testing Item	Instrument/Equipment	Type	Serial No.	Calibration Valid Date
1	IP6X	Dust test chamber	GT1321	GT20170703001	2023-12-16~2024-12-15
		IP4X test sonde	CX-T4D	CX2306394	2024-06-19~2025-06-18
2	IPX7	Leaching tank	/	SZ008	/
		Steel rule	0~1000mm	2482515	2024-02-21~2025-02-20
		Stopwatch	PC2810	979862	2024-03-14~2025-03-13

—End of Report—