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# **Test Report**

Verified Code:849514

Report No.:H20240903144001-01EN

Customer: ProTech CO., Ltd

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

Sample Name: Sinora Hard Shell Case

Sample Model: SIN-03630-19BK-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 2hen Jie

Approved by

Zhang Huaming

Gao Zhenjie

Zhang Hua Ming

GRG METROLOGY & TEST GROUP CO., LTD.

Issued Date: 2024/10/30

GRG METROLOGY & 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



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Sample Source ☐ Commissioned units send sample ☐ Others:	
Sample Model Quantity Sample No. Test No.	<b>®</b> /
Sinora Hard Shell Case SIN-03630-19BK-E 1pc / H202409031440-0	001
Sample Components and Accessories  Accessories  Accessories	
Test with packaging or not □Yes, Outer Packing □No	
Sample quality before test  □ Conformity Product □ Non-conformity Product □ Others	
Abnormal condition of sample before test  No Abnormalities	/2
Environmental requirements Temperature: 15.0°C ~35.0°C Relative Humidity: 25%~75% Atmospheric pressure: 86kPa~106kPa	
Test Address Shenzhen laboratory: No.10, Dafu Industrial Zone, Guanguang Road, Guang Road, Guang Road, Guang Road, Guang Road, Guang Road, Gua	anlan

#### 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  $1N\pm0.1N$ ;
- 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-03630-19BK-E	1pc	H202409031440-0001	

#### 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
H202409031440-0001	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.1-2 Unpacking and inspection after test



Fig.1-3 Pre-test metal probe inspection



Fig.1-4 Test set-up diagram

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#### 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-03630-19BK-E	1pc	H202409031440-0001

#### 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

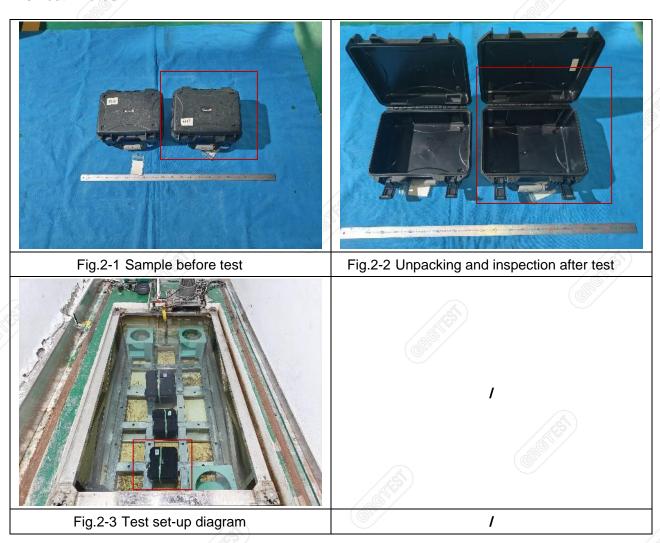
The test result is shown in Table 2-3.

**Table 2-3 Test Result** 

Test No.	Test Result	Conclusion		
H202409031440-0001	No water ingress inside the sample after the test.	Meet the requirements		

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#### 2.5 Test Photos





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## 3 Test Instrument & Equipment

List of Instrument for Testing Equipment					
No.	Testing Item	Instrument/Equipment	Туре	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
		Leaching tank		SZ008	/
2 IPX7	IPX7	Steel rule	0~1000mm	2482515	2024-02-21~2025-02-20
		Stopwatch	PC2810	979862	2024-03-14~2025-03-13

——End of Report——

