

东莞环仪仪器科技有限公司

DONGGUAN HUANYI INSTRUMENTS TECHNOLOGY CO.,LTD

## **HY-IPX8 Water Immersion Test Chamber**

### **Operation Manual**

**Survival by quality  
Seek development with integrity  
Seek efficiency by management**

## Catalog

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## **Preface**

Thank you for purchasing our rain environment test equipment!


Before using this equipment, please read this manual carefully, and follow the prescribed procedures, so that you can use it smoothly. Please keep in mind the precautions, can avoid the machine failure due to misoperation, the correct maintenance method can prolong the service life of the machine.


All the products of the company have been inspected, so you can rest assured to use them. If you have any difficulties or questions, please contact the agent or directly inform the after-sales service department of the company.


# Safety precautions


## 1. Matters need attention

In this manual, regarding the safety precautions and to prevent accidents and hazards, please observe the following hazard warning notes:



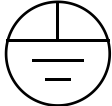
	<p><b>Dangerous:</b></p> <p>The item displayed in this way means that if not followed, the operator may be harmed.</p>
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	<p><b>Warn:</b></p> <p>The item shown may damage the instrument if not followed.</p>
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	<p><b>Pay attention to:</b></p> <p>The items shown are expressed as having the potential to affect the test results and quality.</p>
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<p>[pour]</p> 	<p>The item displayed indicates the auxiliary statement of the product in its operation and use.</p>
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2. On this instrument, the following marks indicates a attention warning.

	warning sign	This mark indicates where reference to the operating manual is necessary.
	Dangerous voltage mark	This mark is indicated as high pressure hazard.
	Ground protection mark	Represents the ground terminal on the instrument.

## I.Overview

This test is applicable to waterproof electrical and electronic products that may be immersed in water during transportation or use; the test piece is immersed in a water tank of specified depth and subjected to specified pressure. After the conditional test, the water ingress condition and performance changes are checked.

## II.Standards

IPX8 protection level in GB4208-2017 enclosure protection level (IP code);

IPX8 protection level in IEC 60529:2013 enclosure protection level (IP code).

ISO20653:2006 Road vehicles - Protection levels (IP code) - IPX8 protection level in electrical equipment against foreign objects, water and contact;

IPX8 protection level in GB2423.38-2005 Environmental testing for electric and electronic products Part 2 Test R Water test method and guidelines;

IPX8 protection level in IEC60068-2-18:2000 Environmental testing for electric and electronic products Part 2 Test R Water test method and guidelines.

## III.Technical parameters

Inner diameter	500mm
Inner height	1500mm
Outer dimension	Approximately OD 750mm*H 2250mm
Basket load-bearing	10 kg
Thickness of stainless steel	5mm
Time control	1～999M59S
Pressure adjustment	Manual control
Pressure display method	Touch screen display, pressure can be set and displayed on the
Pressure gauge adjustment	Normal pressure～500Kap (1～50m water depth)
Maximum limit pressure	Factory setting. Pressure switch protection, usually set to
Pressure protection	Pressure safety valve protection
Deflation method	Automatic deflation after test
Opening method	Cylinder automatically lifts to open and close the cover
Sample fixing method	Sample tray at the bottom of the tank and sample hook at the

Pressurization system	External gas source (the purchaser shall provide a gas source)
Water level display	Scaled water level tube
Lifting device	Portable stainless steel hanging basket
Control system	Key control
Container material	304 stainless steel
Product features	This anti-immersion test device is equipped with pressure
Safety protection system	Power supply overload, short circuit protection, alarm sound
<b>Equipment service conditions</b>	
Diameter of water inlet and outlet pipes	After planning the placement of the equipment, please install the circuit breaker next to it in advance, and install the water inlet pipe and drain pipe below the circuit breaker. The water
Power supply requirements	AC220V $\pm$ 10% (single-phase three-wire), 50Hz $\pm$ 10%; Power: 2KW; Make a 32A air switch alone, the air switch must have a
Environmental conditions	Temperature: 15°C $\sim$ 35°C; Relative temperature: 25%RH $\sim$ 75%RH; Atmospheric pressure: 86kPa $\sim$ 106kPa
Water depth corresponding to pressure gauge value	0.1MPa=100kPa=10M; 0.2MPa=200kPa=20M; 0.3MPa=300kPa=30M; 0.4MPa=400kPa=40M; 0.5MPa=500kPa=50M;
Water level pipe	The water level gauge on the equipment is to see the height of

## IV.Product Structure

Machine structure: 1. Complete machine



## V.How to use

1. Fill the water tank of the equipment with water (it is recommended that the buyer use pure water, and the water quality conductivity of pure water is  $\leq 5\mu\text{S}/\text{cm}@25^\circ\text{C}$ )
2. Loosen the fixing screw of the tank body, open the tank cover, place the test sample on the hanging basket, and hang it on the hook on the upper edge of the tank.
3. Close the tank cover, turn on the water inlet switch and fill the water tank with water.
4. Turn on the main power and press the start button of the controller to start the test: the sample rack can be adjusted to rise and fall during the test. Press the up button to raise the tank cover and sample rack, and press the down button to lower the tank cover and sample rack. .
5. After the test, please turn off the main power.

## **VI. Precautions**

1. If you hear any unusual noise during operation, please stop the machine for inspection and restart it only after the fault is found and solved.
2. Avoid affecting the service life of the equipment.
3. After the test, if the equipment is not needed within a few days, the water in the water tank should be drained and the water tank should be cleaned to keep it clean; it needs to be fully cleaned and maintained once every six months.
4. The equipment should be inspected and maintained regularly every day, and records should be kept to ensure the normal operation of the equipment.
5. Add water: You need to confirm that the water pipe is connected, open the water inlet valve first, then open the faucet, add water to the bottom of the air inlet, and finally close the water inlet valve in time. Please pay attention to add water to the standard scale, do not exceed this air inlet; the water tank must be cleaned on time, and if it is tested frequently, it should be cleaned at least once a week.
6. Put in the sample: Put the test sample gently into the water, and ensure that the sample is completely immersed in water; if the sample is light, you can add weight or put it in a stainless steel basket and then immerse it in water.
7. Sealing: Use auxiliary steel rods to seal the upper cover of the tank body. When locking the nuts, pay attention to locking them in diagonal order (to balance the force on the tank cover).
8. Pressure setting: According to the test water depth requirements, the user can set the test pressure on the pressure sensor.



## EX-factory Inspection

Product name: Water Immersion Test Chamber(IPX8)

Product model: HY-IPX8

Factory number : 250215-02

Manufacture Date: Feb ,2025

Inspection result: Qualified

Inspector: Fu Deng

Auditor: Den Hongyan

Thank you for using our products, our company will provide you with excellent quality and efficient service to bring convenience to your work. Our greatest wish and goal is to make you satisfied!

Dongguan Huanyin Instruments Technology Co., LTD



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