

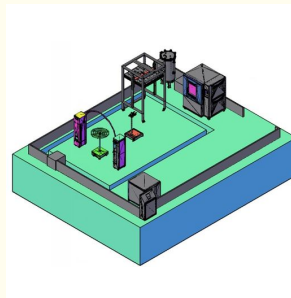
Overall IPX1-IPX9K Waterproof Test Chamber , Simultaneous Environmental Testing Machine

Our Product Introduction

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Basic Information

- Place of Origin: Guangdong , China
- Brand Name: YueXin
- Certification: ISO20653:2013 IEC60529:2013 IEC60598:2021 DIN40050-9:1993
- Model Number: YX-IPX1-9-LYF
- Minimum Order Quantity: 1 pcs
- Price: usd+20000-50000+pcs
- Packaging Details: wooden box package
- Delivery Time: 30-45 Days
- Payment Terms: T/T
- Supply Ability: 100+pcs+30



Product Specification

- Highlight: IPX Integrated Rainfall Test Room , IPX Comprehensive Rain Test Chamber
- Installation Position Dimensions: $\geq W8000 \times D5000 \times H3600 \text{mm}$
- Ambient Temperature: 5 35
- Relative Humidity: $\leq 85\%$
- Length Of The Power Cable: 2.5 M
- Power Supply: 380V, 5KVA
- Highlight: IPX9K Waterproof Test Chamber, Simultaneous Environmental Testing Machine, IPX1 Environmental Simulation Chamber



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Product Description

Overall IPX1-IPX9K Waterproof Test Chamber , Simultaneous Environmental Testing Machine

Testing system overview:

This set of equipment has been widely used in product certification laboratories at home and abroad, and the performance of the equipment has reached the advanced level. There are standard test options in the equipment program, users can select the required standard test items to conduct tests without setting; there is also a custom test option, users can set test data by themselves to adapt to different test standards.

Overview of the overall structure:

1. The system is divided into five parts: (1) A set of intelligent control box; (2) IPX1-2 rain test device; (3) IPX3-4 swing pipe rain test device + a set of shower rain test device; (4) A set of IPX5-6 water spray test device (and intelligent water supply system); (5) IPX7 immersion test box (compatible with water storage tank); (6) IPX8 pressure immersion test machine; (7) IPX9 high temperature and high pressure spray Test chamber; (8) One double-layer comprehensive sample turntable. The design and planning of the overall waterproof test room (the construction of the test room is completed by the customer).
2. The control system is outside the rain room, and the whole process is visually operated. After the testers install the samples, they start the test in front of the control platform. The personnel do not need to be in the rain room, which can better ensure the safety of the testers.
3. The operation of 3IPX1-6 is all completed by the console, with manual operation and automatic operation mode selection, humanized touch screen operation interface, easy and reliable operation.
4. Water pipes use hoses to distribute from the water supply system to the test parts of each waterproof level.

Technical indicators:

1. Control system:

Our Product Introduction

- 1.1 Control function: IPX1-drop rain action control, IPX3-4 swing pipe rain action control, IPX5-6 water supply for spray test, IPX8 pressure immersion test control.
- 1.2 MCGS 7 inches;
- 1.3 PLC controller: Panasonic imported from Japan;
- 1.4 Stepper motor driver: JMC;
- 1.5 Servo motor driver: High-precision Panasonic imported from Japan;
- 1.5 Electronic control components are all imported from LS, Panasonic, Omron, Anliang and other brands;
- 1.6 Protection functions: leakage protection, overload protection, short circuit protection.

2. IPX1-2 Drip Test Equipment:

- 2.1 Suitable for IPX1 and IPX2 testing of products.
- 2.2 Rain drop area: 1200mm×1200mm.
- 2.3 Approximate external dimensions of the equipment: length 1700* depth 1300* height 2420mm.
- 2.4 The height of the drip tank is about: 800mm-1800mm (adjustable).
- 2.5 Drip aperture: 0.4mm.
- 2.6 Hole spacing: 20mm.
- 2.7 Rainfall: 1-3mm/min, automatic flow control with electronic flow sensor.
- 2.8 Test time: 10min.
- 2.9 Column structure, the drip tray runs smoothly.
- 2.10 The equipment racks are all made of high-quality aluminum alloy models and SUS304# stainless steel plates to ensure that they will not rust for a long time.
- 2.11 The rainfall device can be automatically raised and lowered, and the nozzle will automatically stop when it is 200mm from the highest point of the tested object (detected by the photoelectric switch).
- 2.12 Rain plate lifting: use high-quality electric hoist to control the rain plate, and lift gently.
- 2.13 Drip tank adopts vacuum design and high anti-rust stainless steel structure.
- 2.14 The nozzle contact position is designed in a brass cone, which can be easily replaced without tools. A protective cover is installed under the needle, which does not affect the effect of dripping rain and can effectively prevent the needle from hurting people.
- 2.15 High-precision (two-stage coarse-effect filter) + water softening treatment device, which can effectively filter impurities in tap water and prevent needle nozzle from clogging.
- 2.16 It has the function of compressed air drying. After the test is completed, the excess water in the drip tank can be removed to avoid long-term accumulation of water and scaling to block the needle nozzle. (customers need to bring their own air compressor)
- 2.17 The turntable uses a comprehensive turntable, and the motor adopts a stepping motor, which can accurately guarantee the rotation speed requirement of 1r/min required by the standard, and the turntable speed can be set directly on the touch screen.

3. IPX3-4 Rain Test Equipment:

Swing tube rain test equipment:

- 3.1 Comply with IEC60529:2001 "Degrees of protection provided by enclosures (IP Code)", GB4208-2017 "Enclosure Protection Level (IP Code)" 14.2.3, 14.2.4 clauses and Figure 4 and GB7000.1 "Lighting Part I: Requirements in clauses 9.2.4 and 9.2.5 of General Requirements and Tests and Figure 9.4;
- 3.2 Suitable for IPX3, IPX4, IPX4K (limited to R800 and below specifications) tests of products.
- 3.3 Swing tube specifications: R200mm, R400mm, R600mm, R800mm, R1000mm.
- 3.4 Spray aperture: 0.4mm.
- 3.5 Nozzle angle: 120° (IPX3), 180° (IPX4/IPX4K).
- 3.6 Swing angle: 120° (IPX3), 350° (IPX4/IPX4K).
- 3.7 Angle conversion between IPX3 and IPX4: Block the needles (blue) at both ends during the IPX3 test.
- 3.8 Swing tube material: SUS304 stainless steel.
- 3.9 The electronic flow sensor is used to automatically control the flow in the rain (the flow error value is within ±5%).
- 3.10 Swing speed of tube pendulum: 4S for each swing (2X120°) in IPX3 test; 12S for each swing (2X350°) in IPX4/IPX4K test; or user-defined test speed.
- 3.11 Test time: 0-999min.
- 3.12 Drive mode: Panasonic servo motor (the use of servo motor has the advantages of low noise, accurate speed and angle).
- 3.13 Body material of swing pipe rain shower device: SUS304 stainless steel.
- 3.14 The flow rate of each grade is shown in the table below:

swing tube size (mm)	IPX3 Flow (L/min)	IPX4 Flow (L/min)	IPX4K Flow (L/min)
R200	0.56	0.84	7.2
R400	1.1	4.8	15
R600	1.8	2.6	22.2
R800	2.3	3.5	30
R1000	2.9	4.3	/

Part of shower rain test device:

- 3.14 Spray aperture of shower test device: 0.5mm
- 3.15 Number of spray holes in the shower test device: 121 (12 holes/circle in 2 inner circles, with a spacing of 30°; 24 holes/circle in 4 outer circles, with a spacing of 15°)
- 3.16 Brass nozzle size: Ø 102mm
- 3.17 Operation mode: The baffle blocks 1/3 of the nozzle, and the rain at this time is the IPX3 test requirement; no baffle is covered, it is the IPX4 test requirement.
- 3.18 The surface of the shower nozzle is sprayed with an anti-rust coating, which can effectively prevent the watermark on the surface of the nozzle from producing patina and affecting the appearance.
- 3.19 "Hongqi" brand stainless steel pressure gauge is adopted, the surface diameter is 40mm, the precision is 2.5 grade, and the display is intuitive.
- 3.20 Water spray method: hand-held, can be directly connected to tap water for use.

4. IPX5-6 Water Spray Test Equipment:

- 4.1 Comply with IEC60529:2001 "Degrees of protection provided by enclosures (IP Code)", GB4208-2017 "Enclosure Protection Level (IP Code)" 14.2.5, 14.2.6 clauses and Figure 6 and GB7000.1 "Lighting Part I: Requirements in clauses 9.2.6 and 9.2.7 of General Requirements and Tests and Figure 9.5;
- 4.2 Suitable for IPX5, IPX6, IPX6K testing of products.
- 4.3 Aperture: φ6.3mm (IPX5/IPX6K); φ12.5mm (IPX6).
- 4.4 Test time: 0-999min (can be set).
- 4.5 Distance from nozzle to shell: 2.5-3m (manual control).
- 4.6 IPX5 and IPX6 are equipped with two spray guns (IPX6K nozzle can be replaced). The spray guns can be fixed or hand-held to spray water.
- 4.7 Spray gun material: SUS304 stainless steel.
- 4.8 Water storage tank: Compatible with IPX7 immersion tank, the volume of the water tank is about 960L (inner size 1000-800-1200mm).
- 4.9 Large flow water supply pump: Guangzhou Lingxiao stainless steel vertical multistage centrifugal pump.
- 4.10 Pressure gauge: Hongqi brand.
- 4.11 Solenoid valve: Yongchuang brand.
- 4.12 Flow control: The electronic flow sensor automatically controls the flow. IPX5 water flow: 12.5±0.626L/min; IPX6 water flow: 100±5L/min (IPX6); IPX6K water flow: 75±3.75L/min (flow error within ±5%).
- 4.13 Water supply pipeline: The water supply of the equipment is distributed to each equipment by hoses according to the site layout, and is controlled by the electromagnetic water valve at each equipment.
- 4.14 Water supply port: 5 channels (rain drop test, swing pipe rain, IPX5 water spray/IPX6K, IPX6 strong water spray, and shower rain).
- 4.15 Pipe material inside the water supply machine: SUS304 stainless steel water pipe.
- 4.16 Filter: plastic shell, PP cotton filter element. (Five spare filter elements) Softening treatment device.

5. IPX7 Immersion Test Equipment:

- 5.1 It is suitable for the IPX7 waterproof level test of the product.
- 5.2 The maximum water depth allowed for this box is 1.2 meters, and the bottom area: 1000*800mm.
- 5.3 Double-layer structure of immersion tank:
 - (1) The inner layer is welded with SUS304# stainless steel plate to ensure that it will not rust or leak for a long time;
 - (2) 40 square steel is used as reinforcement in the middle of the two layers to keep the inner box from deformation;
- 5.4 The water inlet and outlet pipes are installed under the water tank.

- 5.5 The observation window is made of 12mm tempered glass, which can clearly observe the test situation of the sample. Window width 200mm.
 5.6 The stainless steel base frame is equipped with load-bearing casters and foot cups, which are convenient for moving and fixing.
 5.7 The stainless steel ruler accurately displays the water level.
 5.8 The outer dimension is about length 1080* depth 860* height 1350mm (including casters).

6. IPX8 Immersion Test Equipment:

- 6.1 It is suitable for the IPX8 waterproof level test of the product.
 6.2 The chassis is all welded and formed with stainless steel materials, and the cylinder cover is used to lift the tank cover, which is convenient for operation.
 6.3 Outer dimensions: about length 800*width 950*height 1750mm; container inner dimensions: about diameter 600*height 1200mm.
 6.4 The test time can be set as: 0-999 minutes. When the test time is reached, the pressure supply will be automatically stopped, and the air in the tank will be automatically discharged. The tester can open the tank cover and take out the test sample.
 6.5 Pressure display: Imported "Panasonic" brand-pressure sensor is used to automatically control the test pressure in the tank, control accuracy: $\pm 0.002\text{Mpa}$, sensor display accuracy: 0.001Mpa .
 6.6 The equipment is equipped with a safety valve, which automatically releases the pressure after the rated pressure is exceeded, so as to prevent the operator from improperly operating and setting the pressure too high.
 6.7 The test water depth range is 0-30 meters, that is, the pressurized range is 0-0.3Mpa (users need to prepare their own gas source)
 6.8 The water inlet and drain valves are installed at the bottom of the equipment.

7. Double deck sample turntable:

- 7.1 The upper and lower layers are designed. The upper turntable is fixed with 4 screws, which is easy to disassemble. The upper layer is suitable for IPX3-4 or small sample waterproof level test; the lower layer is suitable for IPX1-2/IPX5-6 or large sample waterproof level test.
 7.2 Diameter of lower turntable: 1000mm, diameter of upper turntable: 600mm
 7.3 Load bearing of turntable: 500KG
 7.4 Height of lower turntable: 300mm, height of upper turntable: 770-1200mm
 7.5 Material: all SUS304# stainless steel.
 7.6 Stepping motor control, the speed can be set on the touch screen.
 7.7 Speed adjustable range: 0-5R/min.
 7.8 Equipped with 4 movable stainless steel casters with brakes, easy to move and fix

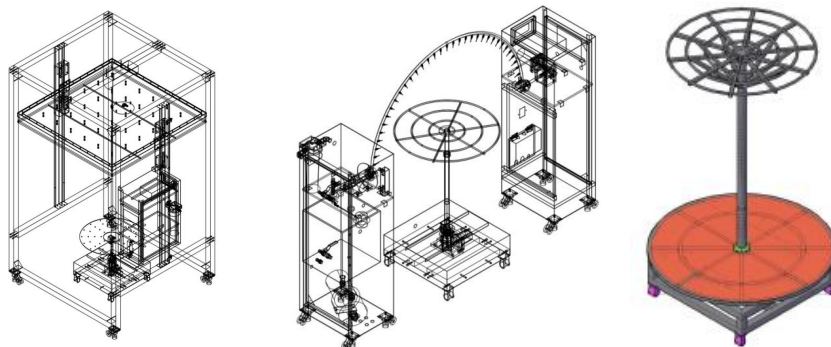
8. IPX9K Waterproof Test Chamber:

- 8.1 This model is suitable for testing IPX9K waterproof level test.
 8.2 The inner box is made of stainless steel material, which is anti-rust and durable; there is a built-in water storage tank to ensure long-term cycle spray test.
 8.3 Inner box size: W1000×D1000×H1000mm; Outer size: W1450×D1230×H1820mm
 8.4 This chamber is suitable for IPX9K waterproof test, Suitable for small sample (size < 250mm) test, spray direction: 0°, 30°, 60°, 90°; 30 seconds for each angle.
 8.5 The flow sensor is used to automatically adjust the flow rate to keep the flow rate stable within the standard range ($15\pm 1\text{L/min}$).
 8.6 Spray support and turntable can be adjusted to meet the spray distance within the standard range ($125\pm 25\text{mm}$).
 8.7 Water temperature of tank: Room temperature (25 °); 80 ± 5 (Deviation temperature can be agreed)
 8.8 The diameter of the turntable is 400mm, and the load limit is 50kg.

Notice:

Due to the technical upgrade, some technical parameters do not conform to the actual machine, please forgive us without further notice.

Product images:



Tags: IPX Multi-level Rainfall Testing Facility , IPX Water Resistance Test Chamber , IPX Environmental Testing Room



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