

IPX3-9K R400 Rain Test Chamber With Side Spray Design For Real-Time Data Display

Basic Information

- Place of Origin:
- Brand Name: YueXin
- Certification:
- Model Number:
- Minimum Order Quantity: 1 pcs
- Price:
- Packaging Details:
- Delivery Time: 30-45 days
- Payment Terms: T/T
- Supply Ability:



Product Specification

•	Controll	er.
•	001101010	U I.

7-inch Touch Screen + PLC

Guangdong, China

YX-IPX39GS-R400

usd+20000-50000+pcs

wooden box package

ISO 20653:2013, DIN 40050-9:1993, IEC60529:2013 VW 80000:2017 LV124 K-10

 Service Environment: Rain / Splash Water / Water Spray / Powerful Water Spray、High Temperature And High Pressure Steam Jet

IPX9K

100+pcs+30

- Window Materia: Tempered Glass
- Type:
- Commodity Name:
- Rotating Speed:
- Diameter Of Detachable 400mm Turntable:
- Turn Table Load Bearing: 40KG
- Highlight:
- Side Spray Design Rain Test Chamber, IPX3-9K Rain Test Chamber

Comprehensive Testing Machine

1-5 Rounds Per Minute

IPX3 IPX4 IPX5 IPX6 IPX9 IPX4K IPX6K

Our Product Introduction

IPX3-9K R400 Rain Test Chamber with Side Spray Design for Real-Time Data Display

Generl specifications:

Dimension	Outer :L1350*W1100*H1750/ L2400*W400*H1500; Inner : W 900×D 900×H 900(mm) External : steel plate; Internal : 304 stainless steel		
Material			
Power supply	380V/50HZ		
Power	18.0kw		

Product presentation:

The IPX3-9K spray test chamber utilizes a lateral spray approach, employing nozzles on the side to direct water towards the samples. By maintaining a consistent spray angle, it guarantees even and precise water application, resulting in dependable test outcomes. Furthermore, its straightforward design permits simple modification of the spray direction by adjusting the nozzles, facilitating user-friendly and seamless operation.

The equipment uses a high-quality servo motor to drive the swing tube, so that the swing angle is more precise and the noise is low.

For IPX5/6 testing, here are two spray modes:up and down sweeping water spray and fixed water spray (Spray water from back to front).

The spray distance(IPX9/9K) can be adjusted manually to meet the standard (125±25mm).

The flow rate is automatically adjusted by an electronic flow sensor, and the flow data will be displayed on the touch screen in real time⁶.

The sample power socket (220V, 10A) is mounted on the right wall of the inner box, which is convenient for the user to do the live test of the sample; and after the sample is powered on, the turntable rotation will be automatically adjusted to forward and reverse rotation to prevent winding ⁷.

Controller: 7-inch touch screen + PLC, using Yuexin self-developed software, which can be switched to multiple languages. Test time setting: 0-999min⁹.

Working environment:

The IPX3-9 spray test chamber serves primarily as a tool to assess the waterproofness of electronic devices and various products under specified water spray scenarios. Its range of applications spans research and development, as well as quality assurance within the electronics industry, especially in sectors like mobile phones, home appliances, automotive electronics, and outdoor gear. With this chamber, users can recreate water spray conditions from various environments to test product waterproofness and guarantee they remain functional without malfunctioning due to water infiltration during real-world use.

Standard features for IPX3/4K:

Item	Parameter		
Radius of swivel tube ¹⁰	R400		
Diameter of swivel tube	800mm		
Internal diameter of swivel tube	15mm		
Internal diameter of nozzle	IPX3/4 : 0.4mm;		
	IPX4K : 0.8mm		
Number of nozzles of swivel tube	See remark ¹¹		
Distance between nozzles	50mm		
Speed of rotation of the swivel tube	60 degree/s		
Swing pipe angle	IPX3 : 120º; IPX4/IPX4K : 350º		
Water volume flow	IPX3(L/min) : 1.1 ; IPX4(L/min) : 1.8 ; IPX4K(L/min):15.0		
Flow error range	±5%		

Standard features for IPX5/6K:

Item	Parameter	
Diameter of nozzles	IPX5,IPX6K : 6.3mm;	
	IPX6 :12.5mm	
	IPX5 : 12.5±0.625 L/min	
Water flow	IPX6 : 100.0±5.0L/min	
	IPX6K : 75.0±3.75L/min	
Spray distance ¹⁴	2.7m	
Spray direction	Spray from back to front	
Spray height ¹⁵	800mm	
Nozzle swing speed	0-20 cycle/min	

Standard features for IPX9K:

Item	Parameter		
Spray distance	125±25mm		
Number of nozzles	4		
Nozzle angle	0°,30°,60°,90°		
Water flow	14-16L/min		
Flow control	Automatic adjustment		
Storage tank temperature	80±5		
Spray pressure	8000-10000Kpa		
Water jet impact	0.9-1.2N		
Test time	120 seconds, 30 seconds per position		

Remark:

1 The pictures in this document are for customer reference only, and there may be color differences between the actual model and the pictures.

2 This document only lists some test standards, which does not mean that other test requirements and standards cannot be conducted. Welcome to communicate and discuss with us.

3 One test only at the same time. The next project can be only carried out after the current test is completed. In addition, we can provide multi-functional customized test solutions according to user requirements.

4 Standard load-bearing upper limit of turntable is 50kg,but also can be customized per requirements. Turntables of φ200mm are provided for replacement.

5 If the sample height exceeds 150mm, it is recommended to choose the swing spray method.

6 Use flow sensor to adjust water flow automatically, the flow is set according to the corresponding test options, and does not support custom settings.

7 Please inform in advance if the voltage(220V) does not match the actual needs so that we can provide customized solutions for you.

8 At present, only Chinese and English interfaces are supported; if other languages are introduced, the software can be updated remotely.

9 It is recommended to set the test time according to the test standard. The water temperature will rise due to long time test which has an impact on the test results.

10 Multiple specifications of pendulum tubes can be provided, please confirm clearly before placing an order; if other specifications are added after purchase, the equipment needs to be returned to the factory to replace hardware and programs. 11 The specifications of swing pipe for IPX3/4 rain test, as shown in the figure below:

Table 9 – Total water flow rate $q_{\rm V}$ under IPX3 and IPX4 test conditions – Mean flow rate per hole $q_{\rm VI}$ = 0,07 l/min

Tube radius	Degree IPX3		Degree IPX4	
R mm	Number of open holes N ¹⁾	Total water flow q_{v} I/min	Number of open holes N ¹⁾	Total water flow <i>q</i> v I/min
200	8	0,56	12	0,84
400	16	1,1	25	1,8
600	25	1,8	37	2,6
800	33	2,3	50	3.5
1 000	41	2,9	62	4,3
1 200	50	3,5	75	5,3
1 400	58	4,1	87	6,1
1 600	67	4.7	100	7.0

¹⁾ Depending on the actual arrangement of the hole centres at the specified distance, the number of open holes N may be increased by 1.

12 This distance is the range from the nozzle to the center of the turntable. If the user wants to extend the spraying distance, he needs to explain in advance.

13 Since the IPX5 water spray is in a parabolic shape, the water spray range will be lower than this height, and the measured maximum water spray height is close to 550mm.

14 The photos may not match the actual ones, and are for user reference only.

Product detail photo:



