



RAIN TEST CHAMBER TORONIPX™ 1234

Rain Test Chamber ToronIPX™ 1234 is designed to assess the physical properties and durability of electronic and electrical products, lighting fixtures, electric cabinets, automotive and motorcycle components, and more under simulated rainy conditions. After testing, it helps verify whether the product meets required standards through calibration, aiding in design, refinement, and quality inspection.

APPLICATIONS

1. **Application Areas:** Designed for testing outdoor lighting, household appliances, automotive components, and other electronic and electrical products.
2. **Control System:** Automatically manages IPX1, IPX2, IPX3, and IPX4 testing.
3. **Standards Compliance:** Meets IEC 60529:1989 +A1:1999 +A2:2013 regulations for enclosure protection levels (IP Code), including clauses 14.2.1, 14.2.2, 14.2.3, 14.2.4.

Rain Test Chamber Toron-IPX 1234

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FEATURES

1. **Versatile Testing** – Supports IPX1, IPX2, IPX3, and IPX4 waterproof grade testing.
2. **Durable Exterior** – Constructed from high-quality steel with a baked enamel finish for durability and aesthetics.

3. **Corrosion-Resistant Interior** – Inner chamber and turntable made of SUS304 stainless steel to prevent rusting over time.
4. **Efficient Water Management** – Built-in water tank with a recycling system, automatic water intake control, and low water level alarm.
5. **Enhanced Visibility** – Features a tempered glass observation window and internal LED lighting for easy test monitoring.
6. **IPX1 & IPX2 Design** – Drip box made of stainless steel with a vacuum design; brass cone nozzle contact for easy installation.
7. **IPX1 & IPX2 Drying Function** – Includes compressed air drying to remove excess water and prevent scaling or clogging (external air source required).
8. **IPX3 & IPX4 Precision Control** – High-quality servo motor ensures precise pendulum speed and angle adjustments, preventing operational errors.
9. **Turntable Drive System** – Stepper motor allows fine-tuned speed and angle adjustments via touchscreen, supporting automatic bidirectional rotation to prevent cable entanglement in powered tests.
10. **Integrated Sample Power Supply** – Built-in AC220V, 10A (110V is also available) power socket with programmable on/off cycles (0-999 minutes) for testing powered samples.
11. **Adjustable Test Duration** – Test time can be set between 0-999 minutes via touchscreen.
12. **Advanced Control System** – 7-inch touchscreen with a controller, utilizing high-quality components. The wiring is compliant with national standards, neatly arranged, and securely connected.
13. **Mobility & Stability** – Equipped with four lockable caster wheels for easy movement and secure positioning.

TECHNICAL SPECIFICATIONS

Test chamber Toron-IPX1 / Toron-IPX2 drip test parameters	
Model name	ToronIPX™ 1234
Interior size	500×500×650 mm (L×D×H)

Test chamber Toron-IPX1 / Toron-IPX2 drip test parameters	
Outer size	900×680×1500 mm (L×D×H)
Turntable diameter	φ200mm
Maximum load of rotary table	50KG
Lifting height of rotary table	150-250 mm
Rotary table tiltable	0° or 15° (horizontal direction)
Turntable speed	1 -5r/min (precise adjustable)
Rotary table rotation mode	Always positive rotation / alternating positive and negative rotation / intermittent rotation
Testing time	0-999 min
Test chamber Toron-IPX1 / Toron-IPX2 rain test parameters	
Drip Rain Panel Area	200x200mm
IPX12 spray hole size	Diameter 0.4mm
Distance between drip holes	20x20 mm
Rainfall	1mm/min (IPX1); 3mm/min (IPX2)
Flow rate adjustment	Manual adjustment
Test chamber Toron-IPX34 rain test parameters	
Cycloid Radius Dimensions	R200mm
Swing Tube Flow Rate	0.56L/min ± 5% (1PX3); 0.84L/min ± 5% (1PX4)

Test chamber Toron-IPX1 / Toron-IPX2 drip test parameters	
Water jet aperture size	0.4mm
Water Jet Orifice Spacing	50mm
Pendulum inner diameter	15mm
Pendulum Angle	120° (1PX3), 350° (1PX4) or customized settings
Pendulum swing speed	240° round trip 4S, 720° round trip 12S (precision control) or customized
Electrical parameters	
Equipment power supply	220V (110V is also available)
Test sample power supply	220V (110V is also available)
Equipment power	1.0KW
Safety Protection Function	Leakage protection, water shortage protection, short circuit protection
Conditions of use	By the user to ensure that the following conditions, and complete the corresponding connection
Use of the site	1. The ground is leveled, the drainage is smooth, the ground and wall waterproof treatment, set up the floor drain or drainage ditch; 2. Load-bearing capacity of the ground is not less than 200kg/m²; 3. The site is well ventilated; 4. No strong vibration around the equipment; 5. No strong electromagnetic field influence around the equipment; 6. No flammable, explosive, corrosive substances and dust around the equipment; 7. Appropriate space for use and maintenance around the equipment: back side, left and right side, top of the equipment: 800mm; front side of the equipment: 1000mm.
Environmental conditions	Temperature: 5°C~35°C Relative humidity: ≤85% Air pressure: 86kPa~106kPa

Test chamber Toron-IPX1 / Toron-IPX2 drip test parameters	
Voltage, frequency	AC220V $\pm$ 10% (110V is also available); 50Hz $\pm$ 10%; Fire-wire+Zero-wire+Protective ground wire
Installed power	1.0kW
Protective	Grounding resistance of the protective earth wire is less than 4 Ω .
Earth Ground Resistance Power switch	1. The user is required to configure the corresponding capacity of leakage protection air switch for the equipment at the installation site, and this switch must be independent for the use of this equipment; 2. Prohibit the use of gate switch or power socket; 3. Leakage protection air switch from the equipment not more than 2 meters away from the location.
Water conditions	1. The user is required to install the site for the equipment to configure the water source, water pressure is not less than 0.2Mpa, and the installation of a 4-point faucet. 2. The faucet from the equipment not more than 2 meters away from the location.



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