

R-SERIES

ENVIRONMENTAL TEST CHAMBERS



TECHNICAL FEATURES

This system of systems meets the requirements of MIL-STD- 810G (Method 506.5) Procedure I and III for rain tests. Procedure II is not applied and only for large test items.

Procedure I: Rain and Blowing Rain

- Circulating Closed Loop Velocity Control with NIST calibrated velocity sensors.
- Spray nozzles for steady state blowing rain mode providing even water distribution at the test item location.
- 1.7 – 4 mm/min water delivery
- Honeycomb straightening vanes for even air distribution.

Procedure III: Drip

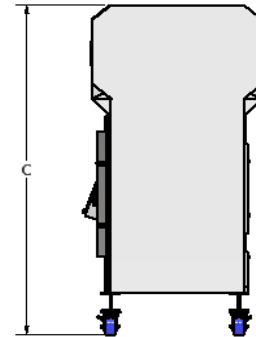
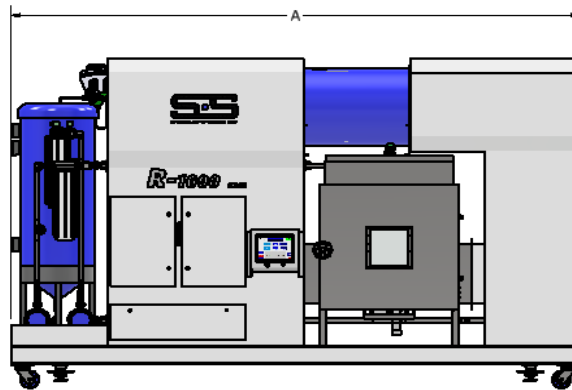
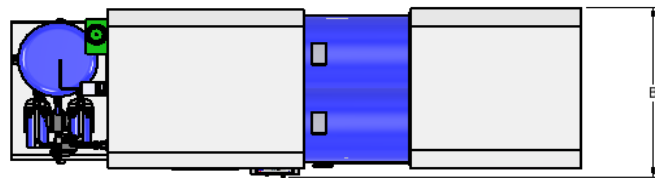
- Integrated rain tank equipped with drip nozzles as shown in MIL-STD FIGURE 506.4-1 for steady state drip test.
- Drip height requirement in MIL-STD 810H.

Heavy Rain Mode: 17mm/min

Light Rain Mode: 8 mm/min

STANDARD FEATURES

- * Stainless Steel Contact Surfaces
- * Variable Speed Laminar Air Flow Velocity (Auto Control)
- * Velocity:
 - 0 to 18 m/s (Standard)
- * LED Interior Lighting
- * Automatic Fill & Drain Features
- * Water Filtration System
- * Blowing Rain Spray System
- * Drip Nozzle System located 1M from test item
- * Rotating Table with Slip Ring
 - Stainless Steel
 - Temperature – 2 Probes
 - Power – 6 wires 24V
- * UL508A Control Panel
 - Allen Bradley PLC & VFD's
 - AB Color Touch Screen
- * Automated water capture, filtration, and circulation system
- * Product Temperature Control and monitoring system.
- * Water Temperature Monitoring
- *Data Recording System (CSV file)
 - Test Item Temperature
 - Water Temperature
 - Wind Velocity
 - Water Pressure
- *Fluorescent Dye Injection System
- *Castors
- *Leveling Feet



STANDARD CHAMBER SPECIFICATIONS

MODEL	Max Test Item Size	Chamber Interior Dimensions	Exterior Dimensions	Rotating Table Size	Weight
R-500	500mm³	1000mm³	A- 4600 B- 1500 C- 2600	500mm	2100kg
R-750	750mm³	1000mm³	A- 5000 B- 2000 C- 3400	750mm	2600kg
R-1000	1000mm³	1250mm³	A- 7100 B- 3100 C- 5100	1000mm	4500kg

Optional Items

- Increased Wind Velocity
- Terminal Velocity Drip Height
- MIL-STD810 Method 521.4 Icing/Freezing Rain Capability
- Rain Fall Rate Transmitter & Real-Time Data Recording
- Rain Drop Size Transmitter & Real-Time Data Recording
- Rain Velocity Transmitter & Real-Time Data Recording
- Custom Sizes Available