SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India

PRODUCT DATA SHEET
Catalogue reference for product evaluation

Phone: +91 7015865225 **Email:** info@scienticoindia.com **Web:** scienticoindia.com **Address:** #71, Industrial Area, Ambala Cantt, Haryana, India

Rainfall Hydrographs Apparatus | FluidoSurge-X 302

Category: Fluid Mechanics · **Country of Origin:** India

Product Overview

The Rainfall Hydrographs Apparatus is a laboratory system designed to study rainfall–runoff relationships and flood hydrograph formation. Manufactured by SCIENTICO, the apparatus enables controlled simulation of rainfall over a catchment surface and measurement of runoff response with time. Made by Scientico India, ISO 9001:2015 certified, and supplied with a calibration certificate and operation manual.

View this product online: https://scienticoindia.com/product/rainfall-hydrographs-apparatus-fluidosurge-x-302/



Request a model-specific quotation
Include quantity and delivery country.

Technical Specifications

Parameter	Specification
Apparatus Type	Rainfall–runoff and hydrograph study unit
Catchment Tank Material	Stove-enameled mild steel
Support Frame	Painted mild steel
Tank Length	1.20 m
Tank Width	0.60 m
Tank Height	0.20 m
Water Supply Method	Overhead spray nozzles
Number of Spray Nozzles	2
Flow Control	Flow control valve and solenoid valve
Flow Measurement	Flow meter
Flow Meter Range	0.4 to 4.4 L/min
Runoff Collector	Traversing vessel
Number of Collection Compartments	17
Volume per Compartment	0.5 L
Mounting	Bench mounted or free standing

Key Features

Key Features

- Simulation of rainfall over a controlled catchment surface
- Measurement of runoff as a function of time
- Immediate visual display of runoff hydrograph
- Traversing runoff collector with multiple compartments
- Adjustable rainfall intensity using flow control system
- Detachable transparent curtains to contain spray
- Suitable for demonstration of various hydrological effects

Applications

- Hydrology and civil engineering laboratories
- Study of rainfall–runoff processes
- Analysis of flood hydrographs
- Teaching catchment response and storage effects
- Demonstration of storm movement and drainage impact

Construction & Design Details

The apparatus features a gravel-filled tank constructed from stove-enameled mild steel and mounted on a robust steel frame. Water is supplied to overhead spray nozzles through a flow meter, solenoid valve, and control valve to regulate rainfall intensity. Runoff exits the tank through an outlet and enters a traversing collecting vessel driven by a motorized mechanism. Each compartment collects runoff for a predefined time interval, producing a direct histogram representation of the hydrograph.

Experiments

- Generation of storm hydrographs from single or multiple storms
- Storm hydrograph from a previously saturated catchment
- Storm runoff from an impermeable catchment
- Effect of a moving storm on flood hydrograph
- Effect of reservoir storage on flood hydrograph
- Effect of land drainage on flood hydrograph

Accessories for Extended Experiments

- Polythene sheet for impermeable catchment simulation
- Plastic containers for surface reservoir storage studies
- Permeable pipe for land drain experiments

Standard Scope of Delivery

- 1 experimental module
- 1 set of hoses
- 1 instruction manual

Export & Supply Capability

SCIENTICO manufactures the Rainfall Hydrographs Apparatus FluidoSurge-X 302 for engineering colleges, technical universities, and training laboratories. The equipment is suitable for domestic and international supply. Export packing and documentation are provided as per customer and destination requirements.

Ordering & Delivery

- Send the product name, quantity, delivery country and destination with your enquiry.

- Production schedule, freight, payment terms and export documents are confirmed in the written quotation.

Frequently Asked Questions

Q1. What is the main purpose of FluidoSurge-X 302?
It is used to study rainfall–runoff relationships and flood hydrograph formation.

Q2. How is rainfall simulated in the apparatus?
Rainfall is simulated using two overhead spray nozzles supplied through a controlled water circuit.

Q3. How is runoff measured over time?
Runoff is collected in a traversing vessel with 17 compartments, each representing a time interval.

Q4. Can different catchment conditions be simulated?
Yes. Accessories allow simulation of impermeable catchments, reservoir storage, and land drainage.

Q5. Is the apparatus suitable for classroom demonstrations?
Yes. The direct visual display of runoff hydrographs makes it suitable for both laboratory experiments and demonstrations.

SCIENTICO INDIA
Manufacturer & Exporter · Ambala, Haryana, India
#71, Industrial Area, Ambala Cantt, Haryana, India

+91 7015865225 · info@scienticoindia.com
scienticoindia.com