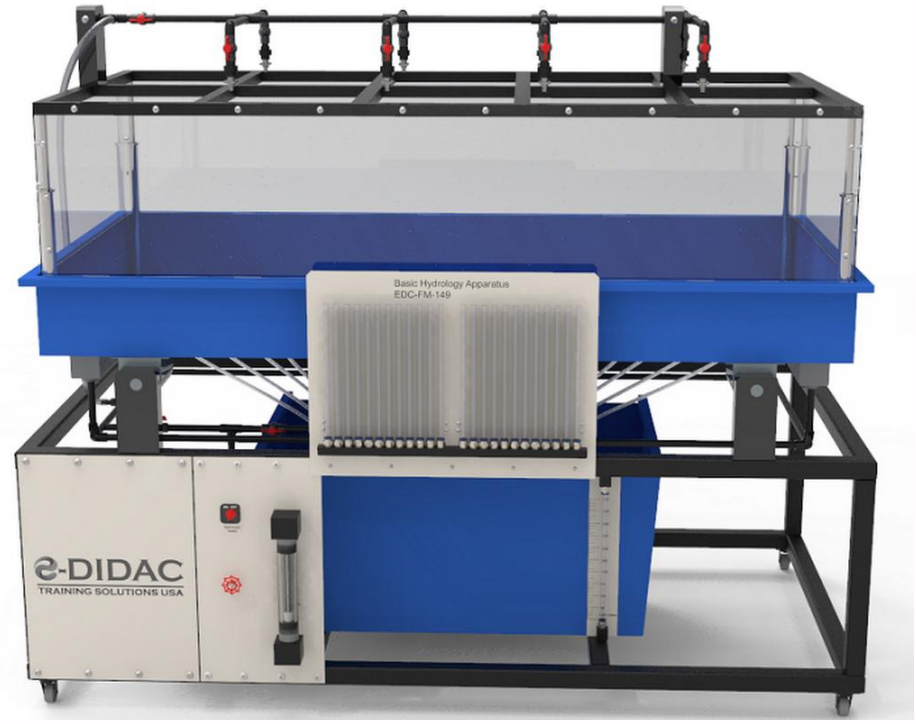
Basic hydrology system apparatus (EDC-FM-149)

EXPERIMENTAL DATA:

- Effect of rainfall of changing duration on the discharge.
- Storing capacity of a soil.
- Exploring steady processes.
- Exploring seepage flow.
- Paraphernalia of wells on the groundwater level over time.

DESCRIPTION:

Apparatus EDC-FM-149 used for learning of seepage and groundwater flows. It contains a closed water circuit with pump and flow control valve with rotameter for the measurement of flow at inlet. The central element is a sand-filled, stainless steel experiment tank with inclination adjustment. To study rainfall, piping is on the top for artificial rain with control valves to operate manually on different area of the experimental bed.



SPECIFICATIONS:

- Inclinable stainless steel experiment tank.
- Experimental tank contains 19 measuring connections to detect groundwater levels and screens for separating the chambers.
- Wells with open seam tubes in the experiment tank.
- Rainfall device with different nozzles that are adjustable.
- Water supplies and drains can be selected separately.
- Instruments: Tube manometers for groundwater and flow meter for water supply.
- Investigation of rain-discharge relationships.
- Storage capacity of soils.
- Seepage flows and groundwater flows.

DIMENSIONS AND WEIGHT:

- L x W x H (mm): 2450X 1150 X 1850 approx.
- Weight: 295 kg approx.

SCOPE OF DELIVERY:

- 1 x EDC-FM-149
- 1 x Instructional Manual

TECHNICAL DATA:

- **Experiment Tank:**
  - **Surface Area:** 2m x 1m
  - **Depth:** Min. 0.2m
  - **Max. Sand Filling:** 0.3m³
  - **Inclination Adjustment:** -2.5% to 5%
- **Precipitation Device:**
  - **Nozzles:** 8 (switchable in 2 groups of 4)
  - **Flow Rate per Nozzle:** 1 - 4.7L/min
  - **Spray Pattern:** Square
- **Pump:**
  - **Power Consumption:** 0.55kW
  - **Max. Flow Rate:** 2000L/h
- **Storage Tank:**
  - **Capacity:** Min. 180L
- **Measuring Ranges:**
  - **Pressure:** 19x 0 - 300mmWC
  - **Flow Rate (Water Supply):** 150 - 1700L/h
  - **Flow Rate (Water Drain):** 0 - 1700L/h