

HomeWaterLab technical characteristics

Main features

- Design based on premise plumbing of a typical Dutch house.
- Compact and portable facility thanks to its horizontal configuration.
- Prolonged and automatized experiments without supervision feasible
- Manual control also feasible.
- Easy access to pipes facilitating installation of sensors and elements of other materials.
- Pipes with realistic lengths and diameters.
- Eleven consumption points (driven by solenoid valves) – seven are binary in nature (either on or off) and four are adjustable (desired flow rate controllable).
- Coupling with a control panel allowing for user-defined time-dependent water consumption patterns to be allocated to the consumption points.
- Warm water deliverable at three consumption points through a boiler.
- Presence of a buffer tank and a pump to mitigate pressure oscillations due to water usage outside the facility
- PVC-U pipes utilized to minimize microbial growth.
- Logging of pressure, temperature, and flow rate at a high frequency. During the measurements, the data is logged every second and can easily be exported for further analysis.

