Designed For Reliability... Automated tipping bucket rain gauge calibration device

METEOROLOGICAL

General Description

The Model TB340A is HyQuest Solutions' latest generation for laboratory calibration of Tipping Bucket Rain Gauges (TBRGs). Utilising load cell technology, the TB340A dispenses water by mass rather than volume for increased repeatability. It is integrated with a Programmable Logic Controller (PLC), to be used in conjunction with PC software for autonomous operations improving calibration throughput.

A single station supports two calibration vessels for calibrating up to two TBRGs at a time. Each calibration vessel has 5 outlet valves that can be used (with nozzles) in combination to select up to 31 different rainfall rates. The working platform for each vessel is height adjustable to support TBRGs of different shapes and sizes, with or without the funnel assembly attached. The PC software is designed to meet a wide range of calibration requirements supporting many TBRGs through the setting of custom TBRGs and test procedures. Using MODBUS over RS-485, a number of stations can be connected for centralised control of all calibration processes. It also supports the generation of calibration reports.

Features

- Automated Laboratory Calibration Device Model (TB340A)
- Up to two Tipping Bucket Rain Gauges (TBRGs) calibrated simultaneously.
- Support of up to 5 nozzles for up to 31 rainfall rates without changing nozzles.
- Height adjustable platform for different TBRGs
- PC software can run a series of tests without user interaction
- PC software supports many stations through MODBUS on RS-485
- Automated report generation at test completion.
- Support for third-party TBRGs through custom setups.

Specifications

- Construction:
 - Frame: aluminium
 - Valves: Brass
 - Vessels: Polycarbonate
- Power
 - Operating Voltage: 110/240 VAC, 50/60 Hz to 0V)
- Performance:
 - Dispensed Mass: 653g
 - Dispensed Accuracy: ±0.15 %F.S. (±1 g)
 - Load Cell SWL: 3 kg
 - Max. Dispense Rate: 4 x 300 mm/hr,

1 x 1000 mm/hr

- Overall Dimensions:
 - 2000mm x 700mm x 500mm (H x W x D)



Model TB340A AUTOMATED TIPPING BUCKET RAIN GAUGE CALIBRATOR



N.B. Specifications are subject to change at any time without notice.



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