



Rain Gauge Field Verification Kit



Applications

- Verification of rain gauge calibrations in large rain gauge networks
- National Hydro-Met Services
- Hydrology projects
- Weather enthusiasts
- Flood warning rain gauge networks
- Hydrometric networks

Features and Benefits

- Mechanical device with simple operating principle
- Multiple flow rates generated for different rainfall intensities
- Compatible for use with most rain gauge orifice areas
- Flexible – can be used with different measuring principles e.g. tipping bucket / weighing



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All rain gauge calibrations drift over time. It is inefficient and expensive for network operators to have to recall all rain gauges periodically, particularly if those rain gauges are within acceptable calibration thresholds. Instead, periodic checks can be made on the rain gauge calibration when it is still in the field to determine whether it requires full laboratory re-calibration. The EML Rain Gauge Field Verification Kit is designed for this purpose.



The field verification kit is a simple mechanical device which can be used to simulate five different flow rates. By using three sizes of bottle, the approximate duration of each testing schedule can be planned based on a field engineer's available time. Based on the results of the tests, a rain gauge can either be certified as being within the required calibration limits or sent back to a laboratory for re-calibration.

The Kit is flexible for use with most rain gauges, in terms of orifice diameter and measuring principles (e.g. tipping bucket rain gauges and weighing rain gauges). Pulse outputs can be recorded by a counter device which can be supplied with the field verification kit (optional).

Technical Specifications			
Precision / Repeatability	Nozzle Diameter	Flow Rate	Repeatability
	0.6 mm	11 ml/min	± 10%
	1.0 mm	34 ml/min	± 10%
	1.2 mm	52 ml/min	± 10%
	1.5 mm	98 ml/min	± 5%
	2.0 mm	166 ml/min	± 5%
Rainfall Intensity	Rainfall intensity depends on gauge orifice area. See Table 4 in User Manual for conversion information.		
Rain Gauge Collecting Areas	127cm ² – 500cm ²		
Operating Temperature	0°C - 60°C		
Weight	3Kg		

Product code	Description
P-780-650	Rain Gauge Field Verification Kit (No Pulse Counter)
P-780-630	Digital Pulse Counter

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