





Overview

The ARG314 (manufactured by EML) is Campbell Scientific's recommended solution for many hydrological or meteorological applications such as weather stations and flood warning systems.

The ARG314 is a versatile gauge suitable for climates with all types and intensities of rainfall. The injection moulded UV-stabilised material from which the gauge is made means that the ARG314 is an extremely robust and versatile instrument, ideal for applications where data precision and accuracy are critically important.

Benefits and Features

- Suitable for all types of climates and intensities of rainfall
- > Extremely robust and versatile for applications where data precision and accuracy are critical
- > Unique aerodynamic shape for accuracy of measurements, even in windy or exposed sites - supported by published academic research (Colli et al., 2018 & Pollock et al., 2018)
- Precision injection moulded internal components resulting in outstanding accuracy and repeatability
- > Meets all WMO recommendations for funnel area
- > External levelling bubble for easy levelling
- > No base plate required. Adjustable mounting feet also make levelling this gauge straightforward
- > Improved nozzle design repeatable performance up to 1000 mm/hr

Technical Description

The internal tipping bucket mechanism has been designed to ensure maximum performance repeatability.

The ARG314 is a UV-stabilised injection-moulded plastic replica of the very successful, highly accurate aluminium SBS range.

Traditional cylinder-shaped rain gauges are inaccurate due to the effect of wind blowing over the orifice. The physical presence of the gauge causes air to accelerate, carrying rainfall away from the collecting vessel. The effect of this can be up to a 20% reduction in rainfall catch. The unique aerodynamic shape of this range of scientific standard rain gauges reduces this effect, ensuring a high level of confidence in the accuracy of our measurements.

Cables are available in 6 m, 10 m, 15 m, 20 m & 30 m lengths.

Specifications

Gauge Specifications

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Resolution/Calibration	Metric: 0.1 mm or 0.2 mm
WMO Compliant	Yes
Output	Contact Closure (Reed Switch) Dual reed switch upgrade available (contact CSL)
Typical Accuracy	99% up to 120 mm/hr
Rainfall Intensity	0-1000 mm/hr (with mathematical correction over 120 mm/hr - contact CSL)

Operating Temperature	1°C - 70°C
Color	White
Funnel Diameter	20.0 cm/7.98 inch
Funnel Area	314 cm²/48.67 sq. inch
Height	43.5 cm to 46.5 cm (with feet adjustment)
Weight	2.5 kg

For comprehensive details, visit: www.campbellsci.eu/arg314

