



MINIMET

Raingauge Calibration

The ARG 100 tipping bucket raingauge has a nominal calibration of 0.2 mm/tip.

The collecting funnel diameter is 254 mm.

The volume of rainwater collected by the funnel which gives one tip of the counting mechanism is calculated by multiplying the area of the collecting funnel by the tip calibration.

Area = πr^2 where $\pi = 3.14$ and radius $r = 127$ mm
Tip calibration = 0.2 mm

$$\begin{aligned} \text{So } \pi r^2 \times 0.2 &= 3.14 \times 127 \times 127 \times 0.2 \\ &= 10,129 \text{ mm}^3 \\ &= 10.129 \text{ cm}^3 \\ &= 0.01 \text{ litre} \end{aligned}$$

The optimum accuracy of the raingauge is quoted at 3 tips per minute.

This relates to an optimum flow rate

