

## DOCUMENT NO.

AT-FCG-001

## REVISION

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## Who This Guide Is For

This guide provides practical, step-by-step calibration procedures for using AirTrap cassettes with common air sampling pumps and field calibration equipment. It is intended for field technicians, industrial hygienists, and laboratory personnel. For the engineering rationale behind AirTrap's calibration compatibility, see the AirTrap Engineering Position Statement (AT-EPS-001).

## The Short Version

### AIRTRAP IS A DROP-IN REPLACEMENT

AirTrap replicates the internal geometry and airflow characteristics of the Air-O-Cell spore trap cassette. You calibrate your pump exactly as you do today — to 15 LPM — and then run AirTraps in their place. No new equipment, methods, or flow settings are required.

## Before You Begin

- Target flow rate: **15 LPM** (unless your sampling method specifies otherwise).
- Use the manufacturer-recommended field calibrator for your pump.
- Have both a calibration (dummy) cassette and a fresh AirTrap sampling cassettes on hand.

## Method A — Pumps Calibrated with an External Field Calibrator

Applies to most spore trap sampling setups — including the **Zefon Bio-Pump** — and to any pump you currently calibrate using a separate rotameter or electronic flow calibrator.

*If you currently sample with Air-O-Cell cassettes, nothing about your calibration changes:*

1. Connect your pump to your field calibrator as you normally would, with a dummy cassette in line, or with the field calibrator that pairs with the pump.
2. Adjust the pump to **15 LPM** using your standard method.
3. Remove the dummy cassette or field calibrator
4. Collect your sample per your normal procedure using AirTrap.
5. Perform a post-sampling flow check per your normal procedure.

**TIP** Your existing dummy Air-O-Cell cassette still works. Or, if you prefer, an AirTrap can serve in its place now. Just remove the top cap from AirTrap so it fits. It presents the same flow and back pressure characteristics at 15 LPM.

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### Method B — A.P. Buck Pumps (Buck Pump + Buck Field Calibrator)

The A.P. Buck pump and its Buck field calibrator are used together as a paired unit. Calibrate the same way you would for any spore trap:

1. Remove the top cap of an AirTrap cassette to create an open **dummy cassette**.
2. Place the dummy cassette on the pump inlet.
3. Using the Buck field calibrator, calibrate the pump to **15 LPM**.
4. Remove the dummy cassette and connect a fresh AirTrap cassette.
5. Sample with the AirTrap exactly as you would any other spore trap cassette, then perform your post-sampling flow verification.

#### KEEP THEM SEPARATE

Label and set aside your AirTrap dummy cassette so it isn't mistaken for a sampling cassette in the field.

### Records & Quality

Record pre- and post-sampling flow rates as required by your sampling method. Continue to operate under your organization's established quality management system and any applicable accreditation requirements.

### Questions?

Using a pump or calibrator not covered here? We're happy to walk you through it. Please **contact us** any time — we're here to help.

**AirTrap Technical Support** · 1-800-838-1388 · [support@airtrap.us](mailto:support@airtrap.us) · [airtrap.us](https://airtrap.us)