Zefon Bio-Pump® Plus

The ***Zefon*** Bio-Pump® Plus is the smallest, lightest and easiest to use portable, battery-powered IAQ pumps designed for exclusive use with Air-O-Cell® and Via-Cell® cassettes at a flow rate of 15 LPM.

Over 40% smaller and lighter than the original Bio-Pump!

ZBP-200-CKIT

Features:

- Battery Powered
- Quiet Operation
- Real Time Display Showing Actual Run Time
- Programmable Sample Time (allows unattended operation)
- "Sample Complete" Audible & Visual Indicators
- 'Quick Sample' Operation
- Long Lasting NiMH Battery provides approx 8 hours continuous run time or approx 100 5 minute samples
- Battery Recharge Time of only 3 Hours
- Small Size: 4.375"(w) x 2.75"(h) x 8"(d)
  11.1 cm (w) x 6.8 cm (h) x 20.3cm (d)
- Light Weight: Only 1.6 lbs (0.72kg)

The ***Zefon*** Bio-Pump Plus is not only the most advanced, user friendly pump designed for IAQ, but they are a great value. Each pump includes extra items such as 10 FREE Air-O-Cell cassettes, a carrying case and fast battery charger as standard items. This amounts to over $100 savings when compared to other manufacturers.

PRODUCT	DESCRIPTION	PRICE
ZBP-200	***Zefon*** Bio-Pump® Plus with 110-230v Charger w/ North American Plug	$749.00
ZBP-200-CKIT	***Zefon*** Bio-Pump® Plus with TSI 4046 Calibrator Kit	$2300.00

Each Bio-Pump Plus comes with an Air-O-Cell & Via-Cell flow indicator, battery charger, carrying case, instruction manual and 10 FREE Air-O-Cell® cassettes.

Bio-Pump® Plus Accessories

Bio-Pump with Bioisolation filter

Bio-Pump with remote extension tube

Bio-Pump on Tripod Stand

PRODUCT	DESCRIPTION	PRICE
ZBP-300	Replacement Battery for Bio-Pump® and Bio-Pump® Plus	$72.00
ZBP-304	Bio-Pump® & Bio-Pump® Plus Charger	$54.00
ZBP-310	Bio-Pump® & Bio-Pump® Plus Remote Extension Tube	$31.20
ZA0047	Bio-Pump® & Bio-Pump® Plus Bioisolation Filter	$12.60
ZA0043	Tripod Stand - Heavy Duty	$42.00

Bio-Pump® Plus Calibration Options

Primary Calibrators

For primary calibration, ***Zefon*** offers a TSI primary flow calibrator with all connectors and tools needed for proper calibration. This electronic flow calibrator is designed to work correctly with backpressure sensitive pumps such as the Bio-Pump Plus.

Secondary Calibrator

Each Bio-Pump Plus includes a flow indicator for use as secondary calibration. Simply place the flow indicator on the pump, enter calibration mode and adjust the flow rate until the ball lines up with the 15 LPM line. That's it!

ZBP-302 Secondary Calibrator

Bio-Pump connected to a TSI Primary Flow Calibrator

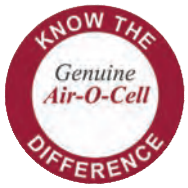
PRODUCT	DESCRIPTION	PRICE
ZBP-302	Air-O-Cell® Flow Indicator	$48.00
ZBP-305	Via-Cell®/Air-O-Cell® CSI Flow Indicator	$48.00
ZBP-200-CAL	TSI 4046 Primary Flow Calibrator kit for ***Zefon*** Bio-Pump® Plus	$1450.00

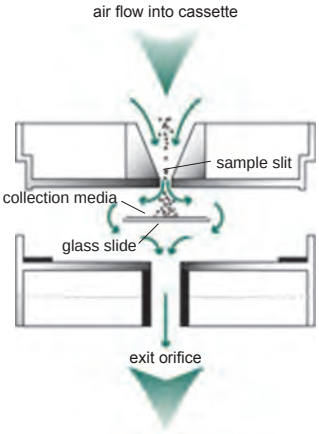
Air-O-Cell® Bioaerosol Cassette

The Air-O-Cell® is a unique sampling cassette designed for the rapid collection of a wide range of both viable and non-viable aero-allergens including mold spores, pollen, insect parts, skin cells, fibers and inorganic particulate.

Features:

- Industry proven & accepted
- Independently validated
- Laboratory preferred, easy to analyze
- Proven results
- No sample loss during shipping & handling
- Pre-loaded, no slides to prepare





The Air-O-Cell operates upon the principle of inertial impaction. Particulate laden air is accelerated as it is drawn through the cassette's tapered inlet slit and directed towards a small slide containing the collection media, where the particles become impacted, and the air flow continues out the exit orifice. The adhesive nature of the collection media prevents the collected particulate from blurring or washing off during the staining process, and eliminates sample loss from vibration during handling and shipment.

After sampling is completed, the cassettes are sent to a laboratory, where the slides are removed and direct microscopic analysis can be immediately performed. The collection media is compatible with a wide range of biological stains and refractive index oils, allowing direct qualitative and quantitative analysis of organic and inorganic particulate.

Air-O-Cell can be used with any standard off-the-shelf sampling pump capable of drawing 15 LPM open flow, including the ***Zefon*** Bio-Pump® Plus, a convenient battery powered hand-held pump for ease of sampling.

Examples of Particulate Collected with Air-O-Cell®


PINE POLLEN


ALTERNARIA


SKIN CELLS


STACHYBOTRYS


DUSTMITE

PRODUCT	DESCRIPTION	PRICE
AOC050	Air-O-Cell® Air Sampling Cassettes, 50/bx	$199.00
AOC010	Air-O-Cell® Air Sampling Cassettes, 10/bx	$45.00
AOCCAL	Air-O-Cell® In-Line Calibration Adapter, each	$1.80

Air-O-Cell® CSI Bioaerosol Sampling Cassette

The Air-O-Cell® Collector for SEM Identification (CSI) is a unique sampling cassette specifically designed for the rapid collection and quantitative and elemental analysis of a wide range of airborne aerosols. With the Air-O-Cell CSI you can use optical and scanning electron microscopy and x-ray analysis on the exact same air sample. The Air-O-Cell CSI collects both viable and non-viable particulate such as mold spores, pollen, insect parts, skin cell fragments, fibers (asbestos, fiberglass, cellulose, etc.) and inorganic particles.

Air-O-Cell® CSI Advantages

- The sample collected in the Air-O-Cell CSI cassette can be examined and re-examined by both optical and electron microscopy in any order without significant particle loss or complex sample preparation.
- Provides excellent detection limits over conventional filter sampling utilizing 25mm or 37mm diameter filter cassettes.
- Eliminates sample loss to cassette walls known to occur with filter samples from vibration or static charge during sampling and shipment.
- Eliminates the need for direct handling or preparation of collection media or microscope slides in the field.
- Eliminates potential cross-contamination between samples and during shipping that may occur with other devices.
- The unique low carbon x-ray background is specifically designed to enable the differentiation of common carbon containing indoor air quality particles (soot, rubber particles, fibers, etc.) in addition to inorganic contaminants.
- The high chemical stability, clarity, and ultra-smooth surface of the collection media enable a wide range of chemical, microbiological, and elemental analysis techniques.
- The Air-O-Cell CSI will work with virtually any kind of sampling pump capable of pulling a 15LPM (vacuum) air flow.
- The collection efficiency of the Air-O-Cell CSI cassette has proven to have stable performance at temperatures down to 0°F (depending on humidity).

Applications

INDOOR AIR QUALITY: Mold spores, pollen, insect parts, dust mites, skin cell fragments, plant fragments, dust, fibers, combustion emissions, etc.

HOME INSPECTION: Mold contamination before or after real estate transactions.

FLOOD RESTORATION: Evaluation of mold spore contamination before, during, and after remediation.

STACK EMISSIONS: Fly ash, inorganic dust, etc.

ALLERGY TESTING: Mold spores, pollen, insect parts, dust mites.

CLEAN ROOM MONITORING: Evaluation of low airborne dust and contaminants from personnel (skin cells, clothing fibers, cosmetics, etc.)

FIBER ANALYSIS: Asbestos, fiberglass, cellulose, ceramics, etc.

Twin Pack Now Available

PRODUCT	DESCRIPTION	PRICE
CSI002	Air-O-Cell® CSI Air Sampling Cassettes, 2/bx	$20.00
CSI010	Air-O-Cell® CSI Air Sampling Cassettes, 10/bx	$95.00

Note: Air-O-Cell® CSI cassettes have a limited shelf life

Via-Cell® Bioaerosol Sampling Cassette

The Via-Cell® bioaerosol sampling cassette is designed to collect both viable and non-viable bioaerosols, maintain viability of the viable mold spores and prevent growth during transport to the laboratory. Simply connect it to any pump calibrated to 15LPM and run your sample. The key to the Via-Cell is that the media used for collection maintains viability of spores and allows several analysis options.

One Sample, Multiple Analysis Options

Culturable Sampling

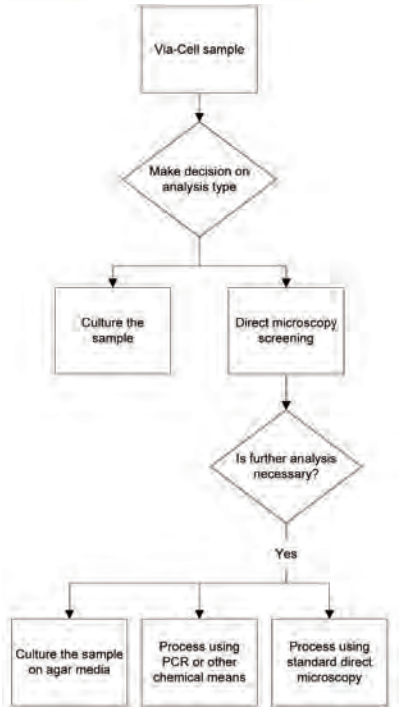
The Via-Cell sampler is the perfect tool for collecting viable organisms and culturing them on agar plates. Simply dilute the media in sterile water and transfer to a culture plate.

PCR Analysis

The Via-Cell utilizes a water soluble collection media which is ideal for PCR and other chemical types of analysis. Once the sample is diluted in water, it can be transferred most anywhere.

Direct Microscopy

Samples collected using the Via-Cell sampler may be “pre-screened” using direct microscopy methods, which allows the analyst to decide if additional analysis techniques are needed, which may include culturing or standard direct microscopy analysis.



PRODUCT	DESCRIPTION	PRICE
VIA010	Via-Cell® Air Sampling Cassettes, 10/bx	$125.00

Note: Limited shelf life