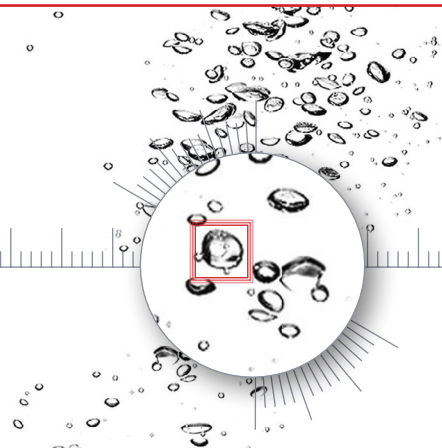


# Smarter

## Air Detection Sensors



With dozens of different alarm and information signals occurring in ICUs, potentially dangerous conditions can mount to desensitize caregivers. Acoustic alarms may be misinterpreted, as even experienced physicians and nurses can have problems attributing alarms to their respective sources. By reducing the number of alarms with smarter air detection sensor solutions, we can help you to provide hospitals, clinics and patients a sophisticated, more desirable device.

### Material Authentication and Counterfeit Detection

Simple, elegant, economic designs that help protect your investment

Piezo Technologies' Air Detection solutions can help you **reduce false alarms** with:

#### ► Precision

Micro Bubble Detection – Our combination of proprietary piezoelectric ceramics and integrated electronics make micro bubble size discrimination possible.

Air vs. Fluid Calculation – Electronic algorithm calculates ratio during fluid pass through.

Sensor Sensitivity – Factory calibration ensures consistent performance with every order.

#### ► Reliability

Stability – Swept-frequency technology optimizes sensor performance for temperature, age, and environmental conditions.

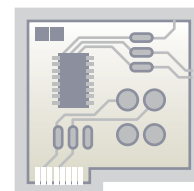
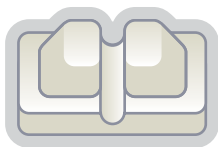
Streamlined and Aligned – Complex projects are managed for on-time delivery with our in-house design, development, and manufacturing teams.

#### ► Repeatability

Experience – For over 20 years we have proven and honed our advanced manufacturing techniques to consistently meet product requirements.

Integrated System – Specialized ceramics, designed housings, and electronics are assembled and tested prior to customer shipments delivering drop-in efficiency.

We will build and deliver the most suitable Air Detection sensor for your application. All of our sensor systems are custom designed from end-to-end to meet your product requirements.



#### ► Ceramics

- Application specific formulations
- Custom size, shape, and thickness design

#### ► Housings

- Tubing diameters and containment method
- Cartridge clamping method
- Mounting orientation
- Footprint size, color
- Hole spacing
- Electrical terminations

#### ► Electronics

- Air detection threshold
- Signaling system
- Additional sensing methods (optical, pressure, occlusions, etc.)
- Material authentication and counterfeit detection



#### **Piezo Technologies helps medical device manufacturers focus on core competencies with:**

- Fully integrated solutions from prototype to development to final production runs
- Rapid design process – helps engineers design and test efficiently
- Platform design for smart electronics

Learn how smarter Air Detection sensor solutions can differentiate your product. Contact us at **US 1-317-876-4670** or at **[info@piezotechnologies.com](mailto:info@piezotechnologies.com)**.



#### **Piezo Technologies**

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