

Differential Air Pressure (DAP) Monitoring

COVID-19 Solutions for Infection Prevention & Control

Overview

Patients who are hospitalized due to COVID-19 need to be placed in a negative pressure room to prevent respiratory droplets from entering the hospital air supply effecting hospital staff, other patients and visitors. DAP sensor accurately and reliably monitors airflow to detect pressure changes in patient isolation rooms and other critical environments. Real-time alerts when predetermined thresholds are crossed is a cost-effective mechanism to ensure the safety of patients and staff members.



Key Features

- Real-time alerts when air pressure differentials are outside of preconfigured range
 - Email, text/SMS, local audible tones & LED visual indicator
 - Local alerting can operate independently of any network connection
 - Optional: strobe lamp and phone calls
- Multi-year battery life with single AA with low battery warnings
- Customizable reporting rates between 1-60 minutes
- NIST traceable calibration by local staff or partner
- Meet Regulatory Requirements including:
 - NIST traceable certifications
 - FCC Part 15
 - FDA CFR 21 Part 11 (Electronic signatures for audit trail)
 - ASHRAE 170
- Real time and historical data are stored on sensor can be read via Android BLE application. (Version 3.0)

How It Works

- Leverages 802.11 networks or Active UHF
- Connect Core™ server collects information from the sensors over the wireless network and streams data into the temperature and environmental monitoring applications, including building automation platforms.
 - Can be easily installed locally by remote technicians as a virtual machine.
 - Same server may also be used for other use cases.
- To ensure safety by providing the ability to check pressure prior to entering a room, sensor placement is as follows:
 - DAP sensor is installed on the exterior of the monitored room.
 - Wall plate is located on the interior wall of the monitored room.
- Simple installation
 - In the monitored room, mount the wall plate and drill a 5/8" hole through the wall to insert the supplied tubing. Wall plates may be screwed directly into the wall or mounted on a single gang box.
 - Mount the supplied bracket on the exterior of the monitored room by screw or with 3M® VHB provided adhesive. The sensor is then easily snapped into the bracket.
 - Devices can easily be removed and installed in another location if needed.

