

Industrial Quality HVAC Monitoring for Fast Food, Big Box and Other Stand-Alone Commercial Buildings



Large commercial buildings use similar monitoring for energy cost reductions and to detect and predict HVAC problems



Predictive Analytics & Tech Triage

Identify Problems Before They Begin: AI processing of performance trends & anomalies may indicate pending failures or system degradation.

Trouble Report: Sent to your HVAIC installer for assessment to determine if a service call is needed.

Automated Alerts: Automated email and text alerts for potential problems & air filter changes.



Multi-Location Data Analysis

Multi-Store Franchises As Example: Each building's data is collected. Performance of all buildings is compared by AI to determine best performing HVAC systems, best energy & cost savings, and how other sites may benefit.



App and Cloud Data

Phone Apps & Cloud Dashboards: Detailed performance data, and alternative filter recommendations for improved air quality!

Parameters Monitored

Air Filter Needs Changing | Monitors air pressure in-front of and behind the filter. Higher frontal and lower behind pressures = Clogged Filter.

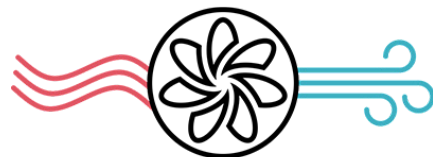
Air Temperature Tracking |

- **Inside Air Duct** pre and post condenser coil for degraded HVAC cooling/heating performance.
- **Exterior Area Around Air Handler** tracks the impact of hot or cold attics, basements, etc. on energy usage.
- **Outdoor Air Temperature** for future AI Analysis to predict HVAC energy usage and energy management control of thermostats or other connected devices.

Duty Cycle & Electrical Current | The run time of your air handler, the electrical current and voltage determine the amount of kW hours of electricity used.

Optional Duct Air Velocity | Duct Air Velocity is Too High or Low. Each HVAC has a defined velocity range.

Optional InDuct Air Quality Monitoring | Monitors the air from all air return ducts. Volatile Organic Compounds - VOCs, Humidity, CO₂, RH and Particles (0.5, 1, 2.5, 4 and 10 ug/cm³) for enhanced filter monitoring.



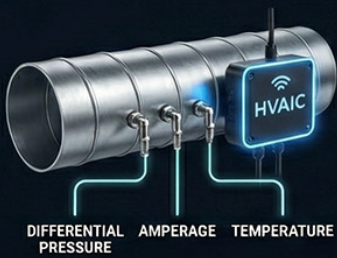
Simple Installation - Only requires the drilling of holes, which are fully sealed afterwards.

Optional UVC Lamp Energy Sensor
Optional Room Temperature Sensor

Portfolio Wide HVAC Visibility

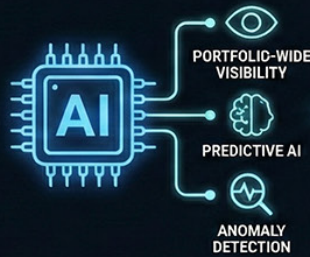
COMMERCIAL / ENTERPRISE

THE SENSE (INSTALLATION & DATA CAPTURE)



Installer attaches sensor & inserts probes, creating instant data stream from the equipment's heartbeat.

THE INTELLIGENCE (AI & DIAGNOSTICS & PORTFOLIO VISIBILITY)



Cloud AI analyzes real-time data across all locations to detect performance degradation, predict failures, and instantly compare building performance.

THE EFFICIENCY (OPEX REDUCTION & ESG COMPLIANCE)



Facility Directors slash energy waste, automate efficiency reporting, and optimize filter schedules based on actual data to meet carbon footprint goals.

THE VALUE (OPERATIONAL EFFICIENCY & ROI)



Prevent AC failure during peak times, avoid costly emergency repairs, and gain centralized control with direct data sharing for maximum ROI.

Data Analytics-AI Agents

One Cloud Platform of all business locations for savings opportunities & HVAC performance improvements



HVAIC®

The Heartbeat of Your Facilities

Specifications & Requirements

- High Performance Differential Pressure Sensor: Auto-Ranging 0 to 0.100 up to 10 inches WC
- 12VDC or 24VAC
- WiFi, Bluetooth and Optional LoRaWAN
- Apple and Android Apps
- Professional HVAC Contractor Installation Required