

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



Large commercial buildings use similar monitoring for energy costs 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: 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.

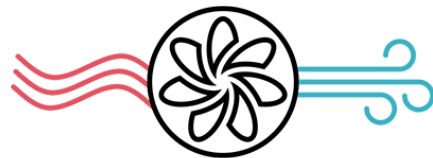
Air Temperature Tracking |

- **Inside Air Duct** 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.

Duct Air Velocity | Duct Air Velocity is Too High or Low. Each HVAC have defined velocity range.

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



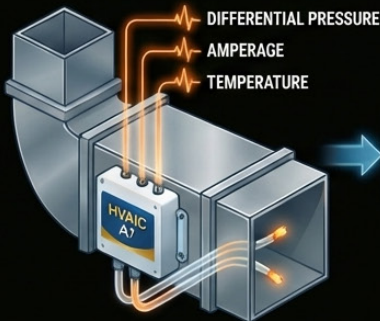
Simple Installation - Only requires the drilling of holes, which are fully sealed afterwards.

**Optional UVC Lamp Energy Sensor
Optional IAQ & Particle Size Sensor**

AI Agents & Data Analytics

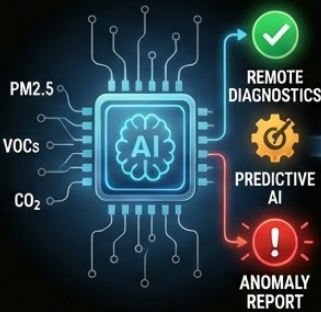
HVAC SERVICE PROVIDER

**STEP 1:
THE SENSE**
(INSTALLATION & DATA CAPTURE)



Simple probe insertion and sensor attachment creates a 24/7 digital presence at customer sites.

**STEP 2:
THE INTELLIGENCE**
(AI & TECH TRIAGE)



Cloud AI identifies performance degradation trends and sends detailed Trouble Reports for remote diagnostics.

**STEP 3:
THE EFFICIENCY**
(OPERATIONAL EFFICIENCY & PROFIT)



Stop nuisance calls; analyze data remotely to determine if a visit is needed and ensure the tech arrives with the exact part.

**STEP 4:
THE VALUE**
(RECURRING REVENUE & RETENTION)



Offer the Certified Health Report to lock in recurring revenue, automate filter sales based on usage, and prioritize replacement leads from a single dashboard.

Increase A Customer's Home Value

Homes with a strong record of HVAC optimal performance & maintenance is of great value to home buyers, and an incentive to purchase an HVAIC home at a higher price than others.



Portfolio Wide HVAC Visibility

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

