

## **DESCRIPTION**

AntrumEYE® is a software platform designed for facilities leaders to monitor and analyze building ventilation systems quickly and efficiently, identifying energy-saving opportunities along the way. The platform streamlines the collection, visualization, and interpretation of ventilation data, which traditionally is slow, manual, and costly. By providing actionable insights, end-users can optimize ventilation performance and reduce energy consumption.

While adaptable for various applications, AntrumEYE was developed specifically with laboratory endusers in mind. The platform provides insights into ventilation demand using data shared over the BMS and from the AntrumX® centralized sensing system (when applicable). Additionally, it displays key safety and energy-saving metrics, including air change rate, kWh savings, supply and exhaust valve CFM, sash position, air quality trends, and more.

AntrumEYE can be used for data trending and collection to:

- 1. offset consulting fees
- 2. prioritize projects using data
- 3. develop site-specific ROI

Sample Dashboard:



The dashboard highlights key safety metrics, energy savings, and areas with the highest ventilation demand. Each card can be clicked to view more detailed data and analyze trends.

- The "Time at Low Demand" indicates the percentage of the selected date range where the observed air change rate is below the design ACH.
- The "Reduced Emissions" card highlights the calculated energy saved due to being at lower demand. We're able to estimate this as a function of actual ACH, AHU efficiencies, and space attributes, such as volume and temperature.
- Each monitored space has a dedicated card showing the current state of that particular space with respect to the following:
  - o Occupancy: the human icon in the title bar is filled when the space is occupied
  - o Fume Hood Demand: cumulative fume hood exhaust
  - o Thermal Load: temperature setpoint
  - Air Quality: highest contamination level across all contaminants relative to threshold limits

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## **HARDWARE**

AntrumEYE is a standalone solution that plugs directly into any standard outlet. It integrates with your building over BACnet MSTP/IP and supports an internet connection, which enables automatic software updates and ensures you always have the latest features and improvements.



| Power Consumption | 1A@24V  |
|-------------------|---|
| Operating Temp.   | 0C - 50C  |
| BACnet MS/TP      | Data rates: 9600, 19200, 38400, 57600, 76800, 115200 Transceiver: Non-isolated, $\frac{1}{5}$ unit loading Switch:  • Terminate: 120 $\Omega$ termination resistor with 510 $\Omega$ bias resistors |
|                   | <ul> <li>Continue: 47kΩ bias resistors</li> </ul>   |
| BACnet IP         | 10/100/1000 Ethernet  |

## **INTEGRATION**

Integrating data points such as air change rate, supply CFM, exhaust CFM, sash sensors, occupancy status, temperature setpoints, etc. is as simple as completing a space questionnaire to auto-generate a BACnet form, which is then imported into AntrumEYE.

## **USER MANUAL**

Instructions for <u>connecting</u> to AntrumEYE, configuring <u>BACnet</u>, using the <u>dashboard</u>, and more can all be found on <u>antrum.com</u>.



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