

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: t**he 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

Phone: 616.214.3155



HARDWARE

AntrumEYE is installed in every AntrumX[®] Gateway and available for the entire lifespan of each calibrated sensor pack. AntrumEYE is also available as a standalone solution.



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: 120Ω termination resistor with 510Ω bias resistors • Continue: $47k\Omega$ bias resistors
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 answering questions about your monitored spaces. A form is auto-generated based on your answers, and once this form is populated with the appropriate BACnet information, you can bulk import the spreadsheet into AntrumEYE.

AntrumEYE has the ability to store and trend ten BACnet points per monitored space. If coupled with AntrumX, these ten points are in addition to the IAQ points generated by AntrumX. If you wish to store and trend more points than allowable, additional points may be purchased from Antrum for a one-time fee in the quantities specified in the table below:

Number of Points	Total Cost
10	\$150
100	\$1,000
1000	\$8,000

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>.

Phone: 616.214.3155