

# INDOOR AIR QUALITY CONTROLLER



## PRODUCT DESCRIPTION

The AirBox Indoor Air Quality Controller (IAQC) is a versatile controller designed to control AirBox air purifiers and monitor air quality. The IAQC has a wide variety of air quality sensors including a flex sensor slot that can be allocated to an application specific sensor. Each air quality sensor has custom thresholds assigned through the AOS portal that can incite an operational function upon exceedance of a contaminant's threshold. The IAQC also encompasses a variety of air quality sensors including a "flex" sensor that can measure concentrations of an application specific contaminant. The IAQC is equipped with BACnet connectivity as well as the Advanced Operating System for smart monitoring and control.

## AIR QUALITY SENSOR SPECIFICATIONS

Sensor	Range	Resolution	Units	Accuracy	Expected Lifetime
PM1, PM2.5, PM4, PM10	0 – 1,000	1	µg/m <sup>3</sup>	±10%	>6 Years
Formaldehyde (HCHO)	0 – 1,000	0.1	ppb	±20 ppb or ±20%	>6 Years
Carbon Dioxide (CO <sub>2</sub> )	0 – 40,000	1	ppm	±30.0 ppm ±3.0 %mv	>10 Years
Carbon Monoxide (CO)	0 – 1,000	0.1	ppm	<1%	>5 Years
Nitrogen Dioxide (NO <sub>x</sub> )	0 – 500	1	Index	±10%	>10 Years
Ozone (O <sub>3</sub> )	0 – 5	0.01	ppm	<2%	>10 Years
TVOC	0 – 500	1	Index	±10%	>10 Years
Temperature (T)	-10 – 60	±0.1	°C	±15%	>10 Years
Relative Humidity (RH)	0 - 100	±0.4	%	±6%	>10 Years

## TECHNICAL SPECIFICATIONS

Unit Size	8.63"H x 7.50"W x 2.25"D
Operating Voltage	1~ 120 VAC
Controls	UL Listed AirBox Advanced Operating System (IOT) and BACnet integration. <i>See AOS Spec Sheet for more information</i>
Warranty	Transferable Limited Lifetime Warranty. Lifetime Warranty on material and workmanship. 5 Year warranty on fan and motor package inclusive of electrical.

## BACNET SPECIFICATIONS

Communication Protocol	MS/TP
Hardwire Connection Point	RS485 Port
Total Number of Objects Supported	20+ (See AOS Spec Sheet)

## FLEX SENSOR OPTIONS

Alcohol (EtOH)	Ammonia (NH <sub>3</sub> )
Arsine (AsH <sub>3</sub> )	Carbon Monoxide (CO)
Chlorine (Cl <sub>2</sub> )	Ethylene (C <sub>2</sub> H <sub>4</sub> )
Formaldehyde (HCHO)	Hydrogen (H <sub>2</sub> )
Hydrogen Cyanide (HCN)	Hydrogen Sulfide (H <sub>2</sub> S)
Indoor Air Quality (IAQ)	Nitric Oxide (NO)
Nitrogen Dioxide (NO <sub>2</sub> )	Oxygen (O <sub>2</sub> )
Ozone (O <sub>3</sub> )	Phosphine (PH <sub>3</sub> )
Respiratory Irritants (RESP)	Sulfur Dioxide (SO <sub>2</sub> )
Tert-Butyl Mercaptan (TPM)	VOC

Some flex sensor options are available with different contaminant ranges. Flex sensor options are subject to change depending on availability.

