AirAssure™ Indoor Air Quality Monitor

Knowledge Beyond Measure.

Maintain building health and sustainability with IoT-enabled AirAssure™ Indoor Air Quality (IAQ) Monitors.

Designed to install in less than ten minutes, each device measures gas and particulate pollutants along with essential IAQ parameters to help you optimize and achieve indoor air quality. Deploy one monitor or more and track real-time indoor air quality conditions in your space using TSI Link™ Solutions cloud-based software. With remote access to data and device operation controls, you'll have what is needed to make impactful decisions- anytime, anywhere.

Features and Benefits
- Easy to install – get up and running in less than 10 minutes
- User-friendly dashboard for real-time analysis and reporting
- Manage multiple devices remotely from the comfort of your office or home
- Share data publicly, or keep it private
- Set up custom alerts when certain levels are exceeded
- WiFi Compatability: 2.4 GHz (802.11b/g/n)

Ideal for
- Schools & Universities
- Offices Buildings
- Hospitals & Medical Facilities
- Industrial Buildings
- Government & Civic Buildings
- Hotels & Convention Centers
- Retail Stores & Shopping Malls
- Restaurants
- Power Generation & Petrochemical Plants
- Anywhere People Congregate Indoors

*Carbon Monoxide (CO)

Sensor Type	Electrochemical
Range	0 - 1000 ppm
Accuracy	±15% of reading or ±150 ppb, whichever is greater
Resolution	100 ppb

*Nitrogen Dioxide (NO$_2$)

Sensor Type	Electrochemical
Range	0 - 20 ppm
Accuracy	±15% of reading or ±15 ppb, whichever is greater (typical)
Resolution	1 ppb

*Sulfur Dioxide (SO$_2$)

Sensor Type	Electrochemical
Range	0 - 10 ppm
Resolution	1 ppb

*Ozone (O$_3$)

Sensor Type	Electrochemical
Range	0 - 20 ppm
Resolution	1 ppb

Volatile Organic Compounds (VOC)

Sensor Type	Metal Oxide (i.e. Solid State)
Range	0 - 1,885 mg/m^3
Resolution	.001 mg/m^3

*Carbon Dioxide (CO$_2$)

Sensor Type	NDIR (Non-Dispersive Infrared)
Range	400 - 10,000 ppm
Accuracy	± 3% of reading + 30 ppm (typical)
Resolution	1 ppm

*Formaldehyde (H$_2$CO)

Sensor Type	Electrochemical
Range	0 - 1000 ppb
Accuracy	±20% of reading + 20 ppb (typical)
Resolution	1 ppb

Particulate Matter (PM)

Range	0 - 1000 µg/m^3
Accuracy (PM 2.5) (measured against TSI DustTrak DRX)	±10 µg/m^3 (0 - 100 µg/m^3) ±10% of reading (100 - 1000 µg/m^3)
Resolution	1 ug/m^3

*Accuracy based on 40% relative humidity and 21°C temperature

Relative Humidity (RH)

Range	0 - 100% RH
Accuracy	± 3% RH
Resolution	1% RH

Temperature (T)

Range	0 - 60 °C
Accuracy	± 0.5 °C
Resolution	0.1 °C

Barometric Pressure (BP)

Range	7.7 - 37.2 in HG (270 - 1185 hPa)
Accuracy	± 0.12 in Hg (± 4 hPa)
Resolution	0.01 in Hg (1 hPa)

AC and DC Power Requirements

24VAC Back Panel	24VAC, 50/60 Hz
USB-C	AC/DA Adapter Input: 100 - 240VAC, 50 - 60Hz
AC/DC Adapter Output	5VDC
Power Consumption	< 5 W

Hardware Model Numbers and Parameters

8144-2	CO$_2$, VOC + PM2.5, PM10, T, RH, BP
8144-4	CO$_2$, CO, H$_2$CO, VOC + PM2.5, PM10, T, RH, BP
8144-6	CO$_2$, CO, NO$_2$, SO$_2$, O$_3$ VOC + PM2.5, PM10, T, RH, BP

Included Parts	Universal USB power supply & cable 24 VAC terminal connector 32GB Micro-SD card (installed) Mounting Kit

Parts

814408	8144-2 Replacement sensor cartridge – VOC, BP, T, RH
814401	8144-4 Replacement sensor cartridge – CO, VOC, BP, T, RH
814402	8144-6 Replacement sensor cartridge – CO, SO$_2$, O$_3$, NO$_2$, VOC, BP, T, RH
814403	Replacement PM sensor
814404	Replacement CO$_2$ sensor
814405	Replacement H$_2$CO sensor
814406	Replacement power supply kit
814407	Replacement membrane filters (pack of 3)

Software	The AirAssure™ IAQ Monitor integrates with the TSI Link™ Solution, where you can manage your devices from your home or office. Visit tsi.com/tsilink for more details.

Device

Operational Temperature	0 - 40°C (32 - 104°F)
Storage Temperature	5 - 30°C (41- 86°F)
Operational Humidity	15 - 95% RH (Non-condensing)
Dimensions	6.75 in x 3.5 in x 1.3 in (17.1 cm x 8.9 cm x 3.3 cm)
Weight	0.5 lb (0.23 kg)

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