

AirAssure[™] Indoor Air Quality Monitor



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

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



Specifications

AirAssure[™] Indoor Air Quality Monitor

*Carbon Monoxide (CO)

Sensor Type	Electrochemical
Range	0 - 1000 ppm
Accuracy	±15% of reading or ±150 ppb whichever is greater
Resolution	daa 001

*Nitrogen Dioxide (NO₂)

Sensor Type Range Accuracy Resolution

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

Electrochemical

Electrochemical

0 - 10 ppm

0 - 20 ppm

1 ppb

*Sulfur Dioxide (SO₂)

Sensor Type Range Resolution

*Ozone (0,)

Sensor Type Range Resolution

Total Volatile Organic Compounds (tVOC)

1 ppb

Sensor Type Range Resolution

Metal Oxide (i.e. Solid State) 0 - 1,885 mg/m³ .001 mg/m³

*Carbon Dioxide (CO₂)

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

*Formaldehyde (H₂CO)

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

Particulate Matter (PM)

Range 0 - 1000 µg/m³ Accuracy (PM 2.5) ±10 µg/m³ (0 - 100 µg/m³) (measured against ±10% of reading (100 - 1000 µg/m³) TSI DustTrak DRX) Resolution 1 ug/m³

*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)

nge	0 - 60 °C
curacy	± 0.5 °C
solution	0.1 °C

Barometric Pressure (BP)

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Range
Accuracy
Resolution
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Ra

Ac

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7.7 - 37.2 in HG (270 - 1185 hPa) ± 0.12 in Hg (± 4 hPa) 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 , TVOC + PM2.5, PM10, T, RH, BP
8144-4	CO ₂ , CO, H ₂ CO, TVOC + PM2.5, PM10, T, RH, BP
8144-6	CO ₂ , CO, NO ₂ , SO ₂ , O ₃ TVOC + 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 – TVOC, BP, T, RH
814401	8144-4 Replacement sensor cartridge – CO, TVOC, BP, T, RH
814402	8144-6 Replacement sensor cartridge – CO, SO ₂ , O ₃ , NO ₂ , TVOC, BP, T, RH
814403 814404 814405 814406 814407	Replacement PM sensor Replacement CO ₂ sensor Replacement H ₂ CO sensor Replacement power supply kit 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 Storage Temperature **Operational Humidity** Dimensions Weight

0 - 40°C (32 - 104°F)

5 - 30°C (41-86°F) 15 - 95% RH (Non-condensing) 6.75 in x 3.5 in x 1.3 in (17.1 cm x 8.9 cm x 3.3 cm) 0.5 lb (0.23 kg)

Specifications are subject to change without notice.

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