Critical
Environment
Technologies™

Know the air
YOU'RE BREATHING

Indoor Air Quality Monitoring

The YESAIR is a battery powered, portable air quality detection and data logging instrument designed for intermittent or continuous indoor air quality monitoring.

Dust, spores, smoke, build-up of gas and/or gas emissions along with high humidity levels and inadequate ventilation can cause poor air quality inside buildings that can leave you vulnerable to severe respiratory health issues. You may already be suffering from asthma or allergies or recovering from a respiratory illness, all of which makes breathing difficult at the best of times. Monitoring the indoor air quality can:

- Identify the levels of indoor air contaminants
- Determine if fresh air intake to re-circulated air ratio is adequate
- Improve processes required to guarantee healthier indoor air
- Provide a log of readings for constant analysis so modifications can be made appropriately
- Increase comfort and productivity
- Reduce sickness
- Give you peace of mind

With the handheld, battery operated YESAIR Indoor Air Quality Monitor you can easily detect particles and gases inside buildings.

The YESAIR is available three models:

1. **YESAIR Pump** - draws in sample air through a nozzle with an internal pump on the top of the unit

2. **YESAIR Diffusion** - works by sample air passing through the sensor openings by natural circulation of air on top of the unit

3. **YESAIR Dual Probe Incubator Verification** - draws in sample air using the internal pump, through an attached temperature and relative humidity probe and high humidity gas probe. This model is specifically for CO2 and O2 sampling in high humidity environments such incubator chambers and horticultural applications (greenhouses, mushroom farms, etc).

Multi-line, backlit, LCD display shows sensor readings, battery level and data logging status. The YESAIR can reliably record time-based information, which can be downloaded via a USB port and the YES Viewer Software allows users to analyze and graph the data.

Equipped with Plug & Play Smart Sensor Technology, many of the sensors modules can be changed in the field and are operable within minutes. Choose from a selection of up to 30 different sensors to best suit your application specifications. In addition to the temperature and RH sensors, the YESAIR can handle up to 5 additional internal plug & play sensors consisting of a maximum of 3 electrochemical toxic gas or oxygen sensors, and 2 high current draw sensors such as an infrared PID or catalytic sensor, plus 1 externally mounted particulate sensor.

An optional gas sampling probe is available with the Pump model. The probe has a 10 in / 25.4 cm wand and 30 in / 76 cm of tubing that fits onto the nozzle and allows you to reach into areas that are difficult to access.

KEY FEATURES

- » 8 sensor capacity
- » More than 30 plug & play sensors available to choose from, including electrochemical, catalytic, infrared & PID
- » Externally mounted particulate sensor option
- » Multi-function, easy to use menu
- » Light weight, contoured & comfortable handheld device
- » Displays readings for all installed sensors simultaneously on backlit LCD display
- » Operates from nickel metal hydride (NiMH) rechargeable batteries (standard), or alkaline batteries, or continuously from the plug-in power adapter
- » Hangs on a wall (rear slot molded in), mounts on a camera tripod or sits on a desk
- » Samples air with internal sample draw pump or by diffusion
- » Accommodates electrochemical, catalytic, PID or infrared sensor types
- » High capacity data logging with built-in SD memory card
- » USB data downloading and auxiliary uploading capability from remote probes
- » Proprietary data logging software available
- » RoHS compliant circuit boards
- » CE certified

APPLICATIONS

- » Residential Buildings
- » Commercial Buildings
- » Schools
- » Retirement Homes
- » Sports Facilities
- » Hospitals
- » Laboratories
- » Research Facilities
- » Airports
- » ... and many more

TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	Rugged ABS / Polycarbonate (UL94 rated)
Weight	567 g (20 oz) 655 g (23 oz) with particulate sensor installed
Size	19.7 x 7.8 x 8.9 cm / 7.8 x 3.06 x 3.5 in 25.4 x 12.7 x 8.9 cm / 10 x 5 x 3.5 in with particulate sensor installed
Covers	Sensor cover (removable; top of enclosure) Battery cover (removable; bottom of enclosure)
Security	Slot for cable lock (lower right side)
Case (included)	Hard plastic storage/carrying case with foam lining

USER INTERFACE

Display	Back-lit, multi-line LCD alphanumeric display
Buttons	3 tactile push buttons for user access
Calibration	Automated through keypad
Audible Alarm	Internal 80 dB @ 4'. One set point adjustment. Audible can be switched off through menu.

DATA LOGGING

Sampling Mode	Pump Model: Internal sample pump automatically draws in gas sample of target environment, particulates are sampled by diffusion Diffusion Model: Sample air is diffused naturally over the gas sensors and particulate sensor
Memory	> 1 million data points data logging to SD flash card (optional)
Information Recording	12 bit, multi-channel, user configurable with 2GB SD memory card slot Optional: YES Logger package with 2GB SD memory card, card reader, USB cable and YES Viewer Software
Communication	Miniature USB port for changing settings and configuring logging functions Auxiliary port for attaching the particulate sensor

ELECTRICAL

Power	- Standard (included): Rechargable 3.6 V NiMH battery pack (8 hours continuous operation time with plug-in battery charger/wall adapter (100 - 240 V, 50 - 60 Hz) - Continuous plug in, 6VDC, Class III, 2A DC max wall adapter - Optional (not included): Alkaline AA batteries x 3

ENVIRONMENTAL *(sensor dependant)*

Operating Temperature	5°C to 50°C (41°F to 122°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Humidity	0 - 99% RH non-condensing

CERTIFICATION

CE

Safety Standards: I.S. EN61010-1:2001 (Ed.2)
Emissions Standards: EN 50270:2006
Immunity Standards: EN 50270:2006

PRODUCT CODES

YES-AIR	Pump Model
YES-AIR-D	Diffusion Model

PLUG & PLAY SENSOR OPTIONS

SENSOR	TYPE	RANGE	PRODUCT CODE
Ammonia (NH_3)	EC	0 - 50 ppm	PNP-H
Arsine (AsH_3) **	EC	0 - 2 ppm	PNP-R
Carbon dioxide (CO_2)	IR	0 - 5,000 ppm	PNP-A+
		0 - 10,000 ppm	PNP-A1
		0 - 20% vol	PNP-A2
		0 - 5% vol	PNP-B
		0 - 100% vol	PNP-B1
Carbon monoxide (CO)	EC	0 - 50 ppm	PNP-C
Carbon monoxide (CO) ** *H_2 compensated for reduced response in H_2 rich environments with reading possibly showing as high as 60 ppm with 500 ppm H_2 in monitoring environment*	EC	0 - 50 ppm	PNP-C1
Chlorine (Cl_2)	EC	0 - 5 ppm	PNP-I
Chlorine dioxide (ClO_2) **	EC	0 - 1 ppm	PNP-J
Combustibles	CAT	0 - 100% LEL	PNP-X
Ethylene (C_2H_4) **	EC	0 - 200 ppm	PNP-E1
Ethylene oxide (C_2H_4O) **	EC	0 - 20 ppm	PNP-E2
Fluorine (F_2) **	EC	0 - 2 ppm	PNP-S
Formaldehyde (CH_2O)	EC	0 - 5 ppm	PNP-Q
Hydrogen (H_2) **	EC	0 - 1,000 ppm	PNP-K
Hydrogen chloride (HCl) **	EC biased	0 - 30 ppm	PNP-M
Hydrogen cyanide (HCN) **	EC	0 - 30 ppm	PNP-N
Hydrogen fluoride (HF) **	EC	0 - 10 ppm	PNP-O
Hydrogen sulphide (H_2S)	EC	0 - 50 ppm	PNP-L
Nitric oxide (NO)	EC biased	0 - 100 ppm	PNP-E
Nitrogen dioxide (NO_2)	EC	0 - 5 ppm	PNP-D
Oxygen (O_2)	EC	0 - 25% vol	PNP-F
Ozone (O_3)	EC	0 - 1 ppm	PNP-G
Ozone (O_3) *	EC	0 - 5 ppm	PNP-G1
Phosphine (PH_3) **	EC	0 - 1 ppm	PNP-V
Silane (SiH_4) **	EC	0 - 50 ppm	PNP-W
Sulphur dioxide (SO_2)	EC	0 - 20 ppm	PNP-P
TVOCs	PID	0 - 30 ppm	PNP-Z+
		0 - 300 ppm	PNP-Y+
Particulate Sensor (externally mounted)	PM2.5 PM10	2.5 µg/m3 10 µg/m3	CET-PM2.5 CET-PM10

Legend:

EC	Electrochemical sensor		IR	Infrared sensor
EC Biased	Electrochemical Biased sensor		CAT	Catalytic sensor
PID	Photo Ionization Detector sensor			

* Lowest alarm set point is 1 ppm. Call for lead time; conditions may apply.
** Call for lead time; conditions may apply.
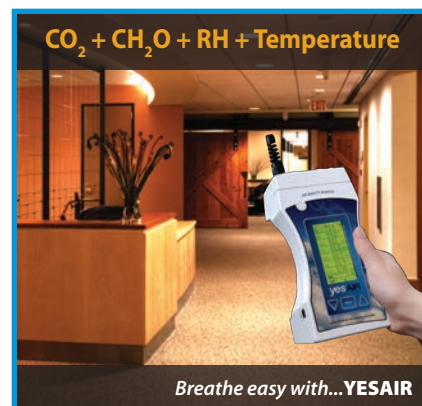
PRODUCT CODES

YESAIR (Sample Draw)	Capacity for 5 gas sensors, includes temperature & RH sensors, internal pump, rechargeable batteries (3 x AA NiMH) and charger, hard shell storage/carrying case
YESAIR-D (Diffusion)	Capacity for 5 gas sensors, includes temperature & RH sensors, diffuser cap, rechargeable batteries (3 x AA NiMH) and charger, hard shell storage/carrying case
1540-0009 (Dual Probe)	YESAIR CO_2 (0-20% vol), comes with remote sample probes for temperature, RH & CO_2, calibration tubing, rechargeable batteries (3 x AA NiMH) and charger, hard shell storage/ carrying case
1540-2009 (Dual Probe)	YESAIR CO_2 (0-20% vol) and O_2 (0-25% vol), comes with remote sample probes for temperature, RH CO_2 & O_2, calibration tubing, rrechargeable batteries (3 x AA NiMH) and charger, hard shell storage/carrying case

ACCESSORIES *(may be specific to certain models)*

CET-8000-CKFT	Standard yellow gas flow tubing for calibration, 2 ft, 3/16" ID / 5/16" OD, priced per foot
CET-8000-CTFT	Teflon lined gas flow tubing for calibrating sticky gases, special non-absorbent, 2 ft, 3/16" ID / 5/16" OD, priced per foot
REG-ADAPTER	Brass fitting that threads onto regulator to accommodate 15 and 17 litre cylinders
YESAIR-LGRPKG	YES Logger Package includes 2 GB memory card and reader, USB cable, YES Viewer software
YES-HHPROBE-10	Handheld probe 10" with 30" of sample hose
YES-SFTWRE	YES Viewer data logging software
1509-0021	Replacement high humidity gas sample probe

Upgrade your YESAIR to the PM2.5 or PM10 particulate sensor that replaces the YESDUST. Units must be returned to the factory for retrofitting. **p/n: CET-DUST-RETRO**

YESAIR shown with externally mounted particulate sensor

$CO_2 + CH_2O + RH + Temperature$

*Breathe easy with...*YESAIR

$CO_2 + O_3 + RH + Temperature$

*Know the Air You're Breathing...*YESAIR

$CO_2 + CO + NO_x + RH + Temperature$

*Know the Air You're Breathing...*YESAIR

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