



Indoor Air Quality



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#### **KEY FEATURES**

- » 8 sensor capacity
- » > 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
- » LCD displays all sensors
- » Sampling with internal sample draw pump or by diffusion
- » High capacity data logging with built-in SD memory card
- » Proprietary data logging software available
- » RoHS compliant circuit boards
- » CE certified

#### **APPLICATIONS**

- » Residential Buildings
- » Commercial Buildings
- » Hospitals
- » Laboratories
- » Research Facilities
- » Parking Garages
- » ... and many more

Upgrade your YESAIR to the 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

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

Available in two models (Pump or Diffusion), each offers multi-channel operation, a selection of more than 30 different plug and play gas sensors, a particulate sensor and a huge capacity data logging to SD memory card. Both models come with one temperature sensor, one relative humidity sensor, the capacity for 5 internal gas sensors consisting of a maximum of three electrochemical toxic gas or oxygen sensors plus two high current draw sensors such as an infrared, PID or catalytic, plus an auxiliary port used for connecting the externally mounted particulate sensor

Sensor readings, battery level and data logging status can be viewed live on the multiline, backlit, LCD display. The optional YES Viewer Logger package consists of a 2 GB SD memory card with card reader, a USB cable and YES Viewer software. The card reader can be used to store or transfer data. Alternatively, data can be downloaded to a computer using the mini USB connection. The YES Viewer PC software allows users to analyze and graph data.

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

TECHNICAL SPE	CIFICATIONS
MECHANICAL	
Enclosure	Rugged ABS / Polycarbonate (UL94 rated)
Weight	567 g (20 oz)
Size	7.8" x 3.1" x 3.9" (197 mm x 78 mm x 98 mm)
Case (included)	Hard plastic storage/carrying case with foam lining
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) - Optional (not included): Alkaline AA batteries x 3
Sampling	<ul> <li>- Pump Model: Internal sample pump automatically draws in sample for "active" sampling of target environment</li> <li>- Diffusion Model: Sample air is diffused naturally over the sensors for a quick, direct reading.</li> </ul>
Memory	> 1 million data points data logging to SD memory card (optional)
Calibration	Automated through keypad
Information Recording	12 bit, multi-channel, user configurable with removable 2 GB memory card. YES Logger package option includes 2 GB SD memory card and reader, USB cable, YES Viewer software.
Communication	Miniature USB port for changing settings and configuring logging functions and auxiliary port used to connect the particulate sensor
Audible	Internal 80 dB @ 4'. One set point adjustment. Audible can be switched off through menu.
ENVIRONMENTAL (sens	or dependant)
Operating Temperature	5°C to 50°C (41°F to 122°F)
Humidity	0 - 99% RH non-condensing
CERTIFICATION	
CE Certified	CE standards for safety: I.S. EN61010-1:2001 (Ed.2) CE standards for emissions: EN 50270:2006 CE standards for immunity: EN 50270:2006

PLUG & PLAY SENSOR SPECIFICATIONS			
SENSOR	TYPE	RANGE	PRODUCT CODE
Ammonia (NH <sub>3</sub> )	EC	0 - 50 ppm	PNP-H
Arsine (AsH <sub>3</sub> ) *	EC	0 - 2 ppm	PNP-R
		0 - 5,000 ppm	PNP-A+
		0 - 10,000 ppm	PNP-A1
Carbon dioxide (CO <sub>2</sub> )	IR	0 - 20% volume	PNP-A2
-		0 - 5% volume	PNP-B
	EC	0 - 100% volume	PNP-B1
Carbon monoxide (CO)	EC	0 - 50 ppm	PNP-C
Carbon monoxide (CO), (H <sub>2</sub> compensated for use in H <sub>2</sub> background)	EC	0 - 50 ppm	PNP-C1
Chlorine (Cl <sub>2</sub> ) <sup>D</sup>	EC	0 - 5 ppm	PNP-I
Chlorine dioxide (CIO <sub>2</sub> ) *	EC	0 - 1 ppm	PNP-J
Combustibles	CAT	0 - 100% LEL	PNP-X
Ethylene (C <sub>2</sub> H <sub>4</sub> ) *	EC	0 - 200 ppm	PNP-E1
Ethylene oxide (C <sub>2</sub> H <sub>4</sub> 0) *	EC	0 - 20 ppm	PNP-E2
Fluorine (F <sub>2</sub> ) * D	EC	0 - 2 ppm	PNP-S
Formaldehyde (CH <sub>2</sub> 0)	EC	0 - 10 ppm	PNP-Q
Hydrogen (H <sub>2</sub> ) *	EC	0 - 1,000 ppm	PNP-K
Hydrogen chloride (HCl) * D	EC Biased	0 - 30 ppm	PNP-M
Hydrogen cyanide (HCN) *	EC	0 - 100 ppm	PNP-N
Hydrogen fluoride (HF) D	EC	0 - 10 ppm	PNP-0
Hydrogen sulphide (H <sub>2</sub> S)	EC	0 - 50 ppm	PNP-L
Nitric oxide (NO)	EC Biased	0 - 100 ppm	PNP-E
Nitrogen dioxide (NO <sub>2</sub> )	EC	0 - 5 ppm	PNP-D
Oxygen (0 <sub>2</sub> )	EC	0 - 25% volume	PNP-F
Ozone (O <sub>3</sub> ) <sup>D</sup>	EC	0 - 1 ppm	PNP-G
Phosphine (PH <sub>3</sub> ) *	EC	0 - 1 ppm	PNP-V
Silane (SiH <sub>4</sub> ) *	EC	0 - 1 ppm	PNP-W
Sulphur dioxide (SO <sub>2</sub> )	EC	0 - 20 ppm	PNP-P
TVOC	חוח	0 - 30 ppm	PNP-Z+
TVOCs	PID	0 - 300 ppm	PNP-Y+
Particulate Sensor (externally mounted)	particulate	PM2.5 PM10	CET-PM2.5 CET-PM10

## Legend:

 EC
 Electrochemical sensor
 IR
 Infrared sensor

 EC Biased
 Electrochemical Biased sensor
 CAT
 Catalytic sensor

 PID
 Photo lonization Detector sensor

D Available with the YESAIR-D model (diffusion) only



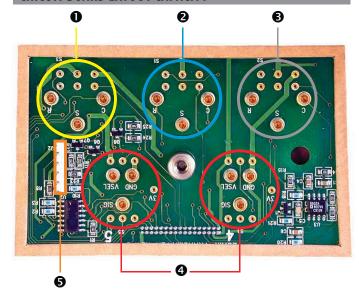
## **PRODUCT CODES**

Pump Model with temperature & RH sensors, internal pump, recharageable batteries (3 x AA NiMH) and charger, capacity for 5 gas sensors, hard shell storage/carrying case	YESAIR
Diffusion Model with temperature & RH sensors, diffuser cap,	
rechargeable batteries (3 x AA NiMH) and charger, capacity for 5	YESAIR-D
gas sensors, hard shell storage/carrying case	

#### ACCESSORIES

YES Logger Package includes 2 GB memory card and reader, USB cable, YES Viewer software	YESAIR-LGRPKG
Handheld probe 10" with 30" of sample hose	YES-HHPROBE-10
External mounted nickel metal hydride pack	YESAIR BATT OPTION
External lead acid battery, in carrying case with charger	YES-AIR BATT EXT
YES Viewer data logging software	YES-SFTWRE
Calibration kit for 17 - 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder	CET-715A-CK1

# **CIRCUIT BOARD LAYOUT CAPACITY**



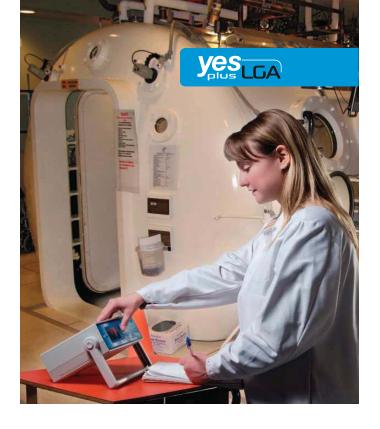
NUMBER	DESCRIPTION
0	Electrochemical or electrochemical biased gas sensor location. Excludes oxygen sensor.
2	Electrochemical gas sensor location, excluding electrochemical biased gas sensor.
•	Electrochemical gas sensor location, excluding oxygen & electrochemical biased gas sensor.
4	Infrared, PID or catalytic gas sensor location.
6	Pin header for temperature / RH sensors.

**NOTE:** In addition to the temperature and RH sensors, the YESAIR can handle up to five additional internal sensors consisting of a maximum of three electrochemical toxic gas or oxygen sensors, plus two high current draw sensors such as an infrared PID or catalytic or particulate sensor.





<sup>\*</sup> Special order item. Minimum 4 weeks delivery. Conditions may apply.



**KEY FEATURES** 

- » 15 sensor capacity
- » > 30 plug & play sensors available to choose from, including electrochemical, catalytic, infrared & PID
- » Extensive, easy to use menu system
- » Rugged ABS enclosure with swivel handle acts as stand support
- » Internal sample pump with inline filter
- » Large, backlit, multi-line, LCD display
- » Data logging to SD memory card
- » Menu control positive sampling
- » RoHS compliant circuit boards

#### **APPLICATIONS**

- » Residential Buildings
- » Commercial Buildings
- » Hospitals
- » Laboratories
- » Research Facilities
- » Parking Garages
- » ... and many more



YES Plus LGA is a multi-gas air quality monitoring and information recording instrument that simultaneously measures and records up to fifteen sensors. With more than 30 different plug and play sensors to select from, users can accurately monitor more within one, easy to carry instrument.

Featuring a fifteen channel sensor capacity including RH and temperature, YES Plus LGA can handle up to 12 additional plug & play sensors consisting of a maximum of eight electrochemical toxic gas or oxygen sensors, four high current draw sensors such as an infrared, PID or catalytic, and the YESDUST remote particulate sensor.

The large, backlit, multi-line scrolling LCD display indicates the sensor types installed and measured values for each gas, battery status and more. The system utilizes a long life rechargeable NiMH battery pack providing more than 24-hours of run time, depending on sensor array installed. The user can also set one alarm level for each gas to activate the internal audible alarm. The system is housed in a rugged ABS enclosure with swivel handle to act as a stand support or for carrying the instrument.

An air sample from the target environment is delivered to the sensors through "active sampling" by the internal sample draw pump. More than a million data points can be logged and stored on a built-in SD memory card for convenience.

The optional YES Logger package consists of a 2 GB SD memory card, USB cable, YES Viewer software, and SD memory card reader. The SD memory card reader stores the data and can be transferred. Alternatively, data could be downloaded through the instrument using a standard USB connection. The YES Viewer software will allow users to analyze and graph data.

TECHNICAL SPE	CIFICATIONS		
MECHANICAL			
Enclosure	Rugged ABS (UL94-HB rated) with multi-position, adjustable aluminum carrying hangle/stand		
Weight	1.7 kg (3.6 lb)		
Size	10.0" x 3.5" x 7.0" (254 mm x 89 mm x 178 mm)		
ELECTRICAL			
Power	Rechargeable NiMH battery pack: 18 - 24 hours of continuous operation time (dependent upon the sensor array installed) c/w plug-in battery charger / 12 VDC wall adapter (100 - 240 VAC; 50 - 60 Hz)		
Circuit	Powerful microprocessor, user configurable		
Sampling	Internal, automatic sample pump for "active" sampling of target environment		
ENVIRONMENTAL (sensor dependant)			
Operating Temperature	5°C to 50°C (41°F to 122°F)		
Humidity	0 - 99% RH non-condensing		
CERTIFICATION			
CE	Pending		



PLUG & PLAY SENSOR SPECIFICATIONS			
SENSOR	TYPE	RANGE	PRODUCT CODE
Ammonia (NH <sub>3</sub> )	EC	0 - 50 ppm	PNP-H
Arsine (AsH <sub>3</sub> )	EC	0 - 2 ppm	PNP-R
		0 - 5,000 ppm	PNP-A+
	ID	0 - 10,000 ppm	PNP-A1
Carbon dioxide (CO <sub>2</sub> )	IR	0 - 5% volume	PNP-B
		0 - 20% volume	PNP-A2
	EC	0 - 100% volume	PNP-B1
Carbon monoxide (CO)	EC	0 - 50 ppm	PNP-C
Carbon monoxide (CO), * (H <sub>2</sub> compensated for use in H <sub>2</sub> background)	EC	0 - 50 ppm	PNP-C1
Chlorine (Cl <sub>2</sub> )	EC	0 - 5 ppm	PNP-I
Chlorine dioxide (CIO <sub>2</sub> ) *	EC	0 - 1 ppm	PNP-J
Combustibles	CAT	0 - 100% LEL	PNP-X
Ethylene (C <sub>2</sub> H <sub>4</sub> ) *	EC	0 - 200 ppm	PNP-E1
Ethylene oxide (C <sub>2</sub> H <sub>4</sub> 0) *	EC	0 - 20 ppm	PNP-E2
Fluorine (F <sub>2</sub> ) *	EC	0 - 2 ppm	PNP-S
Formaldehyde (CH <sub>2</sub> 0)	EC	0 - 10 ppm	PNP-Q
Hydrogen (H <sub>2</sub> ) *	EC	0 - 1,000 ppm	PNP-K
Hydrogen chloride (HCl) *	EC Biased	0 - 30 ppm	PNP-M
Hydrogen cyanide (HCN) *	EC	0 - 100 ppm	PNP-N
Hydrogen fluoride (HF)	EC	0 - 10 ppm	PNP-0
Hydrogen sulphide (H <sub>2</sub> S)	EC	0 - 50 ppm	PNP-L
Nitric oxide (NO)	EC Biased	0 - 100 ppm	PNP-E
Nitrogen dioxide (NO <sub>2</sub> )	EC	0 - 5 ppm	PNP-D
Oxygen (O <sub>2</sub> )	EC	0 - 25% volume	PNP-F
Ozone (0 <sub>3</sub> )	EC	0 - 1 ppm	PNP-G
Phosphine (PH <sub>3</sub> ) *	EC	0 - 1 ppm	PNP-V
Silane (SiH <sub>4</sub> ) *	EC	0 - 1 ppm	PNP-W
Sulphur dioxide (SO <sub>2</sub> )	EC	0 - 20 ppm	PNP-P
TVOCs	PID	0 - 30 ppm	PNP-Z+
1100	110	0 - 300 ppm	PNP-Y+

### Legend:

EC	Electrochemical sensor	IR	Infrared sensor
EC Biased	Electrochemical Biased sensor	CAT	Catalytic sensor

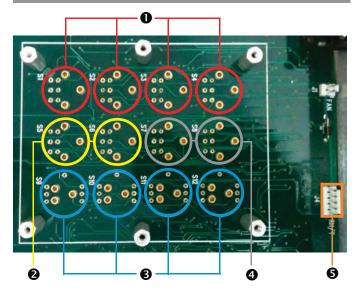
PID Photo Ionization Detector sensor

\* Special order item. Minimum 4 weeks delivery. Conditions may apply.

#### PRODUCT CODES Temperature, RH sensors, internal pump, inline filter, rechargeable YES Plus LGA battery, internal data logging, capacity for 12 gas sensors ACCESSORIES Hard shell carrying case for YES Plus LGA 718 YES logger package, 2 GB memory card and reader, USB cable, YESAIR-LGRPKG YES Viewer software Handheld probe 10" with 30" of sample hose LGA-HHPROBE-30 YES Viewer Logging software YES-SFTWRE Calibration kit for 17 - 103 L cylinders, 0.5 LPM flow regulator & CET-715A-CK1

## **CIRCUIT BOARD LAYOUT CAPACITY**

adapter to fit 17 L cylinder



NUMBER	DESCRIPTION
0	Electrochemical gas sensor location, excluding oxygen & electrochemical biased gas sensor.
2	Electrochemical or electrochemical biased gas sensor location. Excludes oxygen sensor.
6	Infrared, PID or catalytic gas sensor location.
4	Electrochemical gas sensor location, excluding electrochemical biased gas sensor.
6	Pin header for temperature / RH sensors.

**NOTE:** In addition to the temperature and RH sensors, the YES Plus LGA can handle up to 12 additional sensors consisting of a maximum of eight electrochemical toxic gas or oxygen sensors, four high current draw sensors such as an infrared, PID or catalytic, plus a remote YESDUST particulate sensor.







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MANUALS
DATA SHEETS
WIRING DIAGRAMS
ENGINEERING SAMPLE SPECS
PRODUCT SPECIFICATIONS



**APPLICATIONS** 



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