Particulate Sensor

INDOOR AIR QUALITY MONITORS

The YESAIR is available with an externally mounted particulate sensor for monitoring particulates in the air. The particulate sensor detects smoke, dust, pollen, spores, etc. particle concentrations in air by using an optical sensing method. A laser LED and a photosensor are optically arranged in the device and the photosensor detects the laser LED light reflected by dust particles in air.

Ideal for indoor air quality monitoring, and applications associated with air cleaners and purifiers, air conditioners, HVAC and outdoor dust monitoring.

The particulate sensor can be used with the Pump or Diffusion model of the YESAIR. Both models come with one temperature sensor, one relative humidity (RH) 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, catalytic or particulate matter sensor. An externally mounted battery is required (and included) with the particulate sensor option.

The particulate sensor readings can be viewed on the multi-line, backlit, LCD display and are stored during data logging.

KEY FEATURES

» Fast response
» Measures PM2.5 or PM10
» Mounts on the YESAIR which is light weight, contoured & comfortable to hold
» Readings are collected and stored during data logging*
» Compatible with the YESAIR and YESAIR-D

*data logging is included with the YESAIR Logger Package

APPLICATIONS

» Residential Buildings
» Commercial Buildings
» Hospitals
» Schools
» Airports
» Research Facilities
» ... and many more where indoor air quality is a concern

TECHNICAL SPECIFICATIONS

Mechanical

Sensor Holder Material	ABS
Weight YESAIR with sensor installed	655 g (23 oz)
Size YESAIR with sensor installed	25.4 cm x 12.7 cm x 8.9 cm 10 in x 5 in x 3.5 in

Electro-Optical

Measurement	PM2.5 or PM10 (µg/m3)
Detection Range	1 - 999 µg/m3
Resolution	1 µg/m3
Detection Error	
< 100 µg/m3	±15 µg/m3
> 100 µg/m3	±15 % Note: the density of the particles being monitored is relevant to the accuracy of the sensor.
Response Time	10 sec

Environmental

Operating Temperature	-10°C to 50°C (14°F to 122°F)
Operating Humidity	35% to 85%

PRODUCT CODES

CET-PM2.5	Externally mounted particulate sensor (PM2.5)
CET-PM10	Externally mounted particulate sensor (PM10)

The CET-PM2.5 or CET-PM10 particulate sensor options replace the YESDUST Particulate Sensor. To upgrade an exsiting YESAIR in the field, it must be sent back to the factory to be retrofitted with the particulate sensor you choose.