

# AQ-10 REAL-TIME AEROSOL SENSOR

**..for CONTINUOUS MONITORING of PARTICULATE AIR EMISSIONS**



**Model AQ-10, Air Quality Particulate Sensor, is a Versatile Transducer Designed to Continuously Monitor for the Presence of Airborne Particles. AQ-10 is calibrated for OSHA and EPA Regulations.**

## **APPLICATIONS:**

*Monitor PM-10 emissions for EPA Title 1 compliance of the Clean Air Act*

*Continuous monitoring of particulate discharge from cyclones, bag houses or dust control devices*

*Multipoint monitoring of in-plant dust generating processes*

*Activates air cleaners/ventilation systems*

*Continuous monitoring of in-line filter integrity*

*Indoor air quality monitoring*

*Air quality in underground transportation systems*

*Aerosol expose studies*

*Dry solids process control & monitoring*

*Can be used for all particulate air emissions monitoring applications*

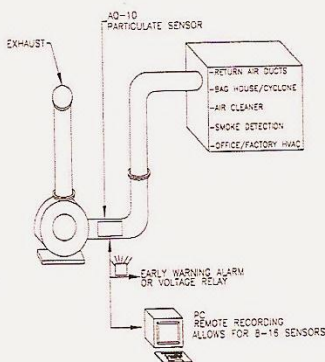
*AQ-10 is suitable for monitoring particulate emissions from cyclones, precipitators, bag houses, or any dust control device. It is also ideal for monitoring air quality in underground transportation systems, ventilation systems, indoor workplaces, or any other application where immediate data on smoke, dust, fumes, or mists is needed. AQ-10 warns you of problems before they become trouble.*

*AQ-10 utilizes an optical layout consisting of an infrared emitter and silicon detector. As particles enter the sensing area an analog output, current or voltage, provides a signal which is proportional to the particle concentration. The signal can be sent to a recorder or central processing panel.*

*AQ-10 easily mounts on walls, inside air ducts or at strategic locations in dust collectors, bag houses, or any dust control device. Units can be configured in a single or multipoint system.*

*If your company generates or emits particulate matter, then the AQ-10 will enhance your air monitoring requirements and assist your company in complying with Federal Regulations.*

## PARTICULATE EMISSIONS MONITORING





***...innovative technology  
In dust monitoring***

## **FEATURES:**

### *Easy Installation*

*Sensor mounts easily on walls, inside ventilation ducts or at strategic locations in dust collectors, bag houses, or cyclones.*

### *Flexible Design*

*Designed for fixed point monitoring either as a single unit or part of a multipoint network monitoring system. The standard 4-20mA or optional 0-2V output can be sent to a remote location for signal processing.*

### *Alarm Output*

*Full range alarm adjustment that provides a voltage output when preset level is exceeded. The alarm output can activate a relay for controlling fans, dampers, or other engineering controls.*

### *Rugged Construction:*

*Constructed in lightweight aluminum case which is able to withstand harsh environments. The absence of moving parts and complete semiconductor design makes the AQ-10 largely unaffected by shock, vibration, temperature and humidity.*

## **SPECIFICATIONS:**

### Sensing Range:

*0.01-200 mg/m<sup>3</sup> (Standard)*

*0.1-2000 mg/m<sup>3</sup> (Optional)*

*0.001-20 mg/m<sup>3</sup> (Optional)*

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*Particle Size Range: 0.1-50µm*

*Precision: 0.2% of full scale @ 25°C*

*Or +/-0.004mg/m<sup>3</sup> (0.001 range)*

*Power: 110 or 220VAC*

*12VDC wall transformer (optional)*

*Signal Output: 4-20mA or 0-2 volts (optional)*

*Alarm Output: 7 VDC*

*Operating Temp: 0 to 50°C*

*Humidity: 95% non-condensing*

*Dimensions: 13X19X10 cm*

*Weight: 1.4 k*

### ACCESSORIES:

*Calibration Standard*

*Precipitation Cap*

*Cleaning Kit*

### OPTIONS:

*NEMA 4X Enclosure*

*Relay Alarm*

*Explosion Proof Enclosure*

*Nitrogen Purge*

*LCD Display*

*Data Acquisition Module*

*Wireless Signal Processing-Radio Modem Data*

*Transmission up to 1500 ft.*