AirSense™ PM Analyser

**Highly accurate particulate PM Analyser
for Total Suspended Particulate concentration monitoring (TSP) and PM sizing**

PM2.5
[Live] 15.6 ug/m3
PM4.25
[Live] 66.9 ug/m3

AirSense PM Analyser
Auburn FilterSense

High precision for industrial process applications

With 25 years' experience designing high-quality monitoring equipment for use in the world's toughest environments, Auburn FilterSense introduces the new AirSense™ Particulate Analyser for airborne particulates. The AirSense™ PM analyser offers unparalleled accuracy and flexibility and provides mg/m³ and PM sizing (PM1, 2.5, 4, 10μm) in real-time, of airborne Particles, for the monitoring of any industrial process environment where exposure to particulates is required for health & safety, OSHA or industrial ventilation requirements necessary to protect people, processes and the environment.

The AirSense™ PM Analyser utilises a next-generation Optical Particle Counter (OPC) to deliver dramatically improved accuracy and repeatability of measurement over a diverse range of Particulate Matter (PM) sizes.

With its advanced design, patented algorithm, dynamic flow, and multiple scatter angles, it delivers more valuable information than any other unit of its kind and now comes with full on-device configuration to give maximum flexibility and accuracy of results.

The insights gained from the ability to differentiate in real-time PM sizes and Total Particulate across a large range of sizes and concentrations provides opportunities to better protect people, processes and the environment by understanding the actual exposure levels in real-time and to what extent.

The Analysis of the actual PM size can be correlated directly to which key particles are being detected further allowing for speciation and therefore type of particle.

- Highly accurate measurement technology
- Lab-grade precision to a field-ready unit
- Up to five times more accurate than comparable technologies
- No pumps or filters for high reliability and ultra low maintenance
- The unit can be quickly and easily configured using the keypad on the device giving you
- full flexibility and allowing you to rapidly respond to changing particulate conditions.
- Site-specific configuration combined with highly detailed data analytics allows users to identify in real-time the hazard from dust and other airborne particulates, giving them the opportunity to take the best preventative action to protect both people and processes.

Analysing and reporting

Collating, analysing and reporting data is essential for any instrumentation. AirSense™ makes this fast and easy both on device and via simple and convenient application software.

View live readings, download historic data and output detailed graphs using the AirSense™ application software. Focus on areas of concern and see the detailed PM size composition.

Spot trends and gain insights on how best to protect your people, processes and the environment. Go beyond, to improve employee health, the working environment and operational efficiency.
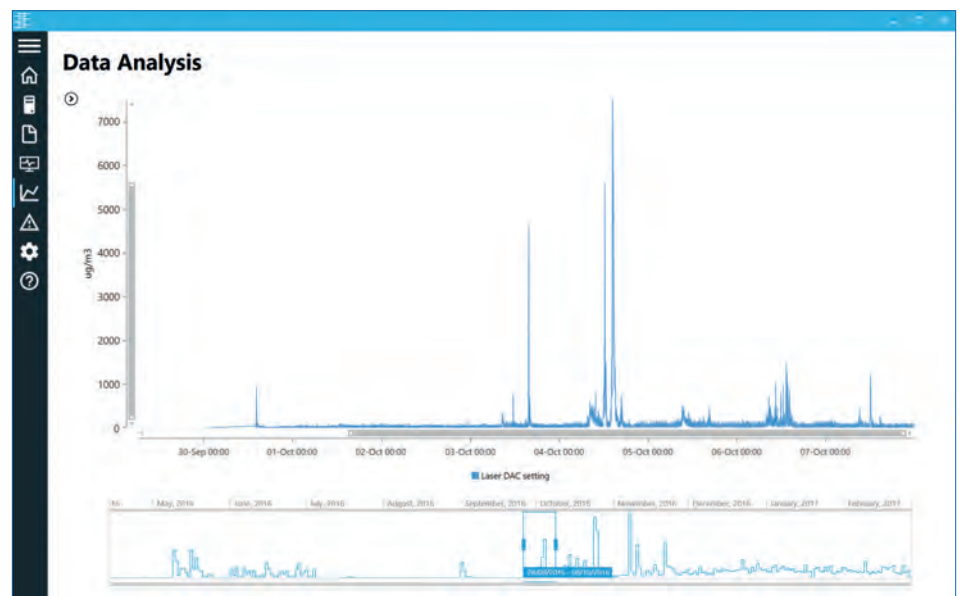
Bringing high accuracy to the harshest environments

By using advanced light scattering techniques combined with patented data processing algorithms, the AirSense™ is able to achieve high levels of accuracy normally only found in higher end laboratory equipment.

The combination of advanced technology and rugged engineering means that the AirSense™ can operate continuously and accurately in even the harshest environments up to hundreds of milligrams.

Using adaptive flow rates, the unit is able to dynamically adjust particulate calculations to ensure that the unit is not over or under-sampling.

Users can now have complete confidence that they are getting accurate, reliable information to allow precise management of dust levels and worker protection.

High reliability, very low maintenance

The AirSense™ is able to run for longer in much tougher environments, giving users more confidence whilst reducing the total cost of ownership.

Ease of use and reliability have been improved dramatically by removing the need for pumps or filters. No longer do units require regular maintenance to guarantee accuracy of data or continuity of operation. A positive pressure fan is used to fascilitate ambient air draught through the system.

Choose where you focus

Because the AirSense™ PM Analyser collects data on all particulates between 0.35µm and 40µm, users can easily access detailed information about any PM size.

The unit allows simultaneous display of any combination of PM sizes required. Our application software allows detailed analysis of all measured particulates, offering advanced 3D graphing across the full size range.

Easily see how the composition of your dust changes over time to ensure your workforce has optimal protection.

PM1.0

PM2.5

Particle Count

PM4.25 (respirable)

PM10

06:00   12:00   18:00
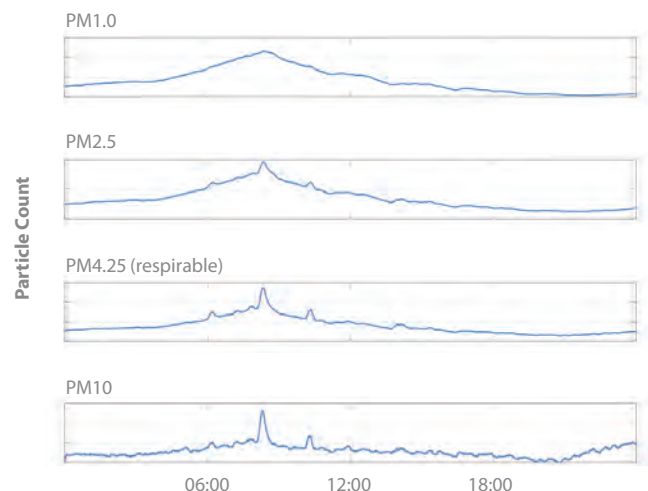
Technical information & dimensions

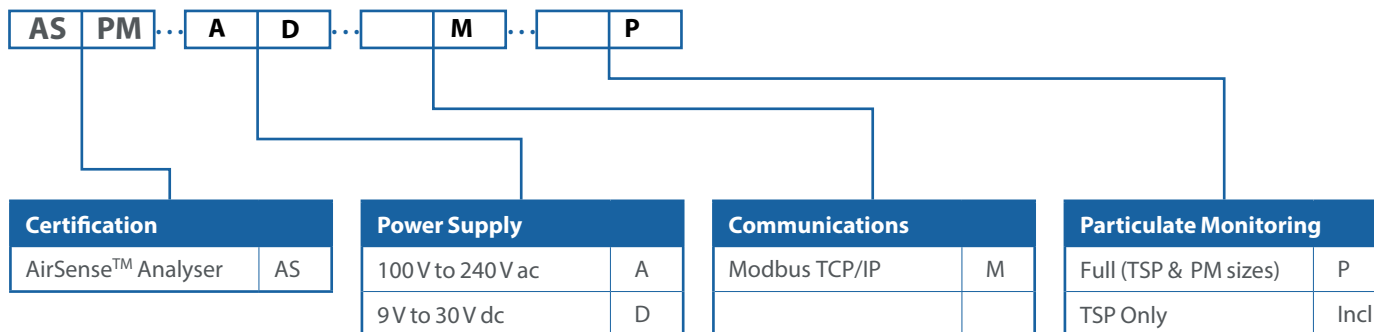| Specifications	
Measurement range	0.1 µg/m³ Up to 1500 mg/m³
PM size range	PM1.0, PM2.5, PM4.25, PM10, & Concentration (mg/m³)
PM density range	0.8 g/ml to 8 g/ml (default: 1.65 g/ml)
Averaging period	1 s – 24 hrs
Maximum particle count	10,000 per second
Accuracy	+/- 5%
Flow rate	Dynamic (1.2 l/m nominal)
Humidity	95% (non-condensing)
Operating temperature	-10 to 40 °C
Relay outputs	Two configurable (alarm outputs)
4-20 mA outputs	Two configurable (real-time readings)
Display	128 x 64 dot matrix display with backlight
Buttons	Five navigation (membrane keypad)
Communications	RS485 data output with MODBUS protocol
	Ethernet (optional)
Power	100 V to 240 V ac 50/60 Hz
	9 V to 30 V dc
Weight	7.1 kg
Data storage	>1 year
Data download	USB (option for connection to Insight Cloud software)
Unit size	H =12" (300mm) x W=12" (300 mm) x D= 6" (150 mm)

Dimensions

12" / 300mm

12" / 300mm

6" / 150mm

Ordering code

AirSense™ unit

Product options: (add codes below for options)

AS	PM	···	A	D	···		M	···		P

Certification		Power Supply		Communications		Particulate Monitoring	
AirSense™ Analyser	AS	100 V to 240 V ac	A	Modbus TCP/IP	M	Full (TSP & PM sizes)	P
		9 V to 30 V dc	D			TSP Only	Incl

Auburn FilterSense

ISO 9001 Certified