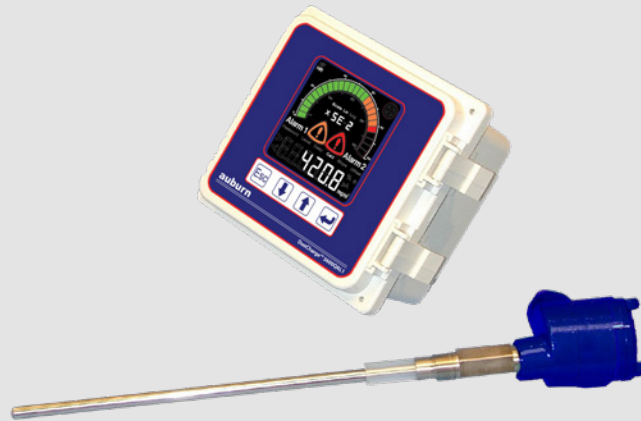


# QAL1 Approved PM-CEM

## 3600QAL1 Continuous Particulate Emission Monitor



### Introduction

- Complies with EN14181, EN13284-2, EN 15267-3 & USEPA MACT requirements
- Certified range of 0-15 mg/m<sup>3</sup>, measuring range 0-1,000 mg/m<sup>3</sup>
- Utilising Auburn FilterSense unique DynaCharge™ Induction technology for enhanced operation
- Measures pAmps directly so can be immediately used as a qualitative monitor without the need for Iso-Kinetic calibration\*

\*A direct measurement of pAmps allows the instrument to be used as a qualitative device "out of the box" (e.g. for European regulation EN15859). In order to meet European regulation EN15267-2, calibration to an Iso-Kinetic test is required where calibrations to a linear or curved coefficient can be directly set within the 3600QAL1 controller facilitating more accurate correlations to actual dust and thereby making the instrument more reliable. (Features typically not available from other Charge transfer technologies.)

### System Description

The 3600QAL1 is a single point approved (TUV and UK MCERTS certified) particulate monitor suitable for use in applications requiring compliance to European and USA EPA requirements. Certified to meet the latest EN14181 standards and US MACT rules the 3600QAL1 is successfully used in applications including Combustion, Incineration, Metals, Minerals and many other Industrial processes, typically after dust collector Bag-houses and Cartridge Filters.

The 3600QAL1 utilises a unique DynaCharge™ Induction technology that provides an enhanced measurement capability and stability above that found from existing DC, AC or ElectroDynamic charge transfer (Triboelectric) technologies.

Equipped with automatic zero & span checks to assure compliance to EN14181 and US MACT regulatory requirements and featuring a unique continuous sensor check function which provides constant system assurance the 3600QAL1 outperforms regulatory

requirements and the periodic sensor short circuit checks undertaken by other manufacturers using either, AC or DC charge transfer technologies.

Auburn FilterSense's unique DynaCharge™ technology features both specific and homogeneous frequency bands to maximize the response from all types of particulate and (unlike other alternative certified Charge transfer systems) is not restricted by particle material types.

DynaCharge™ technology is unaffected by contamination of the sensing rod which may cause signal drift in other Charge transfer technologies and does not typically require ancillary services such as air purge making it a rugged and reliable, cost effective solution to compliance measurement applications.

The 3600QAL1 has a wide dynamic range, allowing the measurement of dust concentrations from very low to very high levels which can affect other technologies such as Light Scatter.

A full colour graphics screen provides users with a simple clear overview of the instrument status, range, dust levels and other parameters without the need to enter complex menu structures.

Sensors can be provided to suit specific application parameters including quick-release couplings, Flange, BSP & NPT threaded connections. Analogue, digital and Modbus outputs are available for plant/DCS/PLC or DAHS system requirements (see specifications ).



Informative and Easy to Use Screen

## Sensor Specifications

<b>Ambient temperature rating</b>	-20° to +50°C (-4° to +122°F)
<b>Enclosure protection rating</b>	IP66 / NEMA 4X
<b>Enclosure Material</b>	Aluminium (powder coated)
<b>Probe material</b>	Standard: 316 Stainless Steel Optional: Coated rod
<b>Probe lengths</b>	18" (460 mm), 30" (760 mm), 36" (915 mm). Other lengths available
<b>Stack/Duct fittings</b>	2" Ansi flange / 1½ BSP, NPT / quick release tri-clamp, Others on request
<b>Sensor cable lengths</b>	Up to 300 ft (100 m)
<b>Stack/Duct flue gas temperature rating</b>	Up to 932°F (500°C)
<b>Measurement range</b>	0.1 to 1,000 pA / 0.1 to 1,000 mg/m <sup>3</sup>

## Controller Specifications

<b>Enclosure Material</b>	Polycarbonate
<b>Power supply requirements</b>	85-260 VAC @ 5 Amps
<b>Ambient operating temperature</b>	-20° to +50°C (-4° to +122°F)
<b>Number of sensors</b>	1
<b>Display</b>	3" x 3" (75 mm x 75 mm) Colour LCD display
<b>Enclosure protection rating</b>	NEMA 4X / IP66
<b>Features included</b>	Navigation keys, alarm status, scaling factor, linear or logarithmic scale, Probe check status, Alarm settings, pA or mg/m <sup>3</sup> units, password, other (refer to manual)
<b>Outputs</b>	2 x Alarm relays, 1 x 4-20 mA, 1 x Modbus 485

