

DUST



FLOW

# PARTICULATE MONITORING SYSTEMS

## *Ambient Dust Trending Monitor for Enclosed Environments*

AMBIENT

DUST

TRENDING



*typical example of an ADT-300*

Large volume sampling

?? Free standing, transportable unit

?? High and High/high alarm levels

Monitor alarm Status and System Check

Zone, workplace and fugitive dust applications

Selection of instruments with alarms or trending (4- 20mA)

The ADT-300 utilises an advanced design particulate instrument and a hi-volume sampling chamber to monitor differences in ambient dust levels. It is a free-standing system offering reliable continuous monitoring of total suspended particulate levels in industrial environments. The ambient air is pulled through the measurement chamber by the integral fan, hence providing flow rates of up to 25 liters/sec. This provides representative measurement even in large ambient workspaces. The sampling chamber is sized appropriately for the air volume to be sampled. PCME's electrodynamic dust sensors are supplied as an integral part of the system since these are proven to provide reliable continuous operation in the harsh environment of a dust laden duct.

Once installed, the monitoring system is configured for a particular type of dust, by monitoring the signal from the background level of particulate drawn past the sensor. The alarm levels can then be set to a percentage or factor above this background reference level. High and high/high alarms can be set by the operator to indicate potential excursions and excessive dust levels. There is an optional 4-20mA output, which can be scaled, allowing the operator to determine how the dust level is compared to a pre-determined limit or warning level.

**System Specification**

	<b>Dust Monitor</b>	<b>Sampling Chamber</b>
<b>Environmental rating</b>	IP65	IP56
<b>Duct size (mm)</b>	N/A	25mm – 150mm (version specific)
<b>Air Velocity (m/s)</b>	N/A	>5m/s
<b>Power consumption</b>	< 1W	Typically 1KW
<b>Power supply</b>	115/230 Vac 50/60 Hz	115/230 Vac (to be specified)
<b>Ambient Temperature</b>	-25°C to +55°C	-25°C to +50°C
<b>Display</b>	LED (alarm 1,2 or status)	N/A
<b>Outputs</b>	2 alarm relay contacts 4-20mA (optional)	N/A

**About PCME**

PCME is a world leader in particulate measurement. The company produces equipment for emissions monitoring, process control and solids flow monitoring. A dedicated team of qualified application and sales engineers is always on hand and should be consulted in the selection and usage of the most suitable equipment for any particulate application.

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