



## PARTICULATE MONITORING SYSTEMS

### *ADVANCED FILTER FAILURE DETECTOR FOR DUST ARRESTMENT PLANT*

**DUSTSENSE 5 & 10**

**TriboACE®**

**PARTICULATE MONITORS**

**FOR FILTER FAILURE**



- Dual alarms (early warning and failure)
- Alarm status and system check LED
- Unique patented TriboACE® technology for increased reliability
- Digital averaging avoids false alarms from baghouse cleaning pulses
- Pre configured alarms (DS5) or adjustable alarms (DS10) versions available
- Combined sensor and control unit (b version) or separate sensor and control unit (a version)

### System Description

The DustSense 5 and 10 series of advanced continuous particulate monitors are based on PCME's unique patented TriboACE® technology, giving added reliability and sensitivity over standard DC Triboelectric systems.

The DustSense 5 has factory pre-set alarm levels which give either warning or failure conditions from a baghouse or other arrestment plant. Commissioning is as simple as pushing a button. The inbuilt micro controller compares the dust level to the pre-set parameters.

The DustSense 10's alarm levels can be set as a factor or percentage of either an instantaneous background level of particulate, or of an averaged background level of particulate. The user has the ability to set the alarms to any one of these parameters and any level above the background or normal level of emissions to indicate early warning of a filter failure or gross failure detection. Alarm delay and data averaging are user selectable.

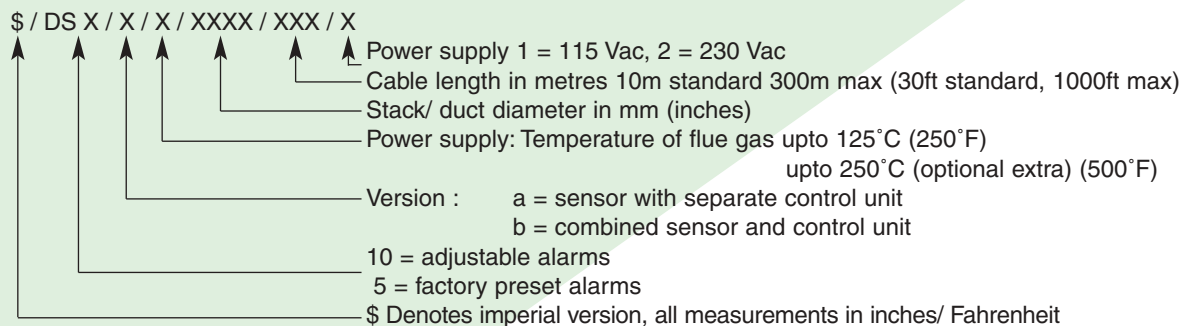
Commissioning is simple and requires no tools or specialised equipment. The DustSense 10 series complies with the U.K.'s EPA for filter failure detection for Part A and Part B processes.

Two versions of each model are available - an "a" version, which comprises a separate sensor and control unit connected by a cable, and a "b" version, which is a combined sensor and control unit that is mounted in the stack or duct. Two separate alarm relay outputs are available. Both the DS5 and DS10 series are suitable for a variety of applications and exhaust gas conditions.

### Specification

	DS5 & DS10		
	Control unit	Sensor	Combined unit (b version)
Enclosure rating	IP 65	IP 65	IP 65
Enclosure size (mm)	81h x 177L x 57w	75ø x 75 L	81w x 57d x 250 L
Enclosure weight	700gms (1½lbs)	600gms (1¼lbs)	1 Kg (2lbs)
Power supply	115/230Vac 50/60Hz	N/A	115/230Vac 50/60Hz
Relay contacts	2 of 2 Amps @ 250Vac	N/A	2 of 2 Amps @ 250Vac
Ambient temperature	-20°C to +50°C (-70°F to +125°F)	-20°C to +50°C (-70°F to +125°F)	-20°C to +50°C (-70°F to +125°F)
Display	Tri-state LED (alarm 1,2 or status)	N/A	Tri-state LED (alarm 1,2 or status)
Cable lengths	N/A	10 to 300m (10m std)(30-100ft)	N/A
Cable to control unit	N/A	8 core screened	N/A
Stack/duct connection	N/A	½" BSP (female)	
Sensor lengths	N/A	100,250,500,750,1000mm nominal 4,10,20,30,40inches nominal	
Sensor material	N/A	316 stainless steel, PTFE insulator	
Stack gas temperature	N/A	-20°C to +125°C standard (250°F) upto 250°C optional (500°F)	
Air purge (optional)	N/A	¼" BSP @ 0.5 litre/min	

### Product Ordering Codes



### 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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PCME products are the subject of worldwide patents. Due to the continuing product development programme, PCME reserves the right to change any specifications without prior notice.