

## Filter Dust Monitor

PROCESS & EMISSIONS MONITORING SYSTEMS

The new PCME DUST ALARM 40 is a compact Continuous Filter Dust Monitor comprising a sensor and control unit, ideally suited for filter monitoring to ensure correct, expected filter performance. The clear, simple, icon-driven menu provides users with a language-free setup and system overview. Utilising ENVEA's patented ElectroDynamic<sup>®</sup> technology ensures accurate, reliable monitoring.

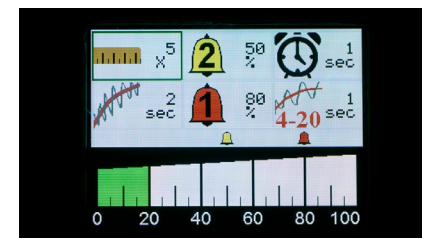
### Key Features:

- ✓ Icon menu
- ✓ Full-colour, anti-glare 2.8" LCD (4:3 ratio)
- ✓ Full, clear System Overview
- ✓ Relative dust reading on clear scale 0-100%
- ✓ 2x Independent alarm set points, clearly defined
- ✓ System status/Alarms clearly defined
- ✓ External keypad for User Settings



### ADDED VALUE FEATURES AND BENEFITS

Feature	Benefit
<b>Icon Menu 1</b>	Simple, easy setup and review of data, not language dependent.
<b>Alarm Delay Feature 1</b>	Ensures that there are no false alarms from bag-cleaning sequences.
<b>Two Independent Alarms 2</b>	Each of the two alarms can be set independently by the user, directly on the scale.
<b>Dust 'Overrange' Icon 3</b>	Instant notification of 'overrange' to define broken and leaking bag failures.
<b>Security Setting 4</b>	Settings can be locked to prevent tampering by unauthorised personnel.
<b>DSP Signal Processing</b>	High accuracy signal providing reliable results.
<b>Field Upgradeable</b>	Enhanced features can be added at any time without the need to return the instrument to factory.



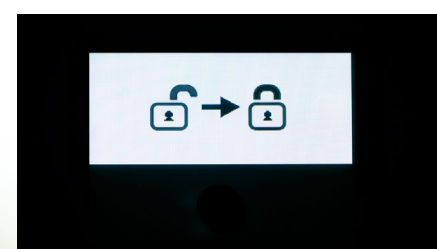
Settings Screen



Normal System Operation



Overrange Alarm



Set Password



# PRODUCT SPECIFICATIONS

## SYSTEM OPTIONS AND SPECIFICATIONS

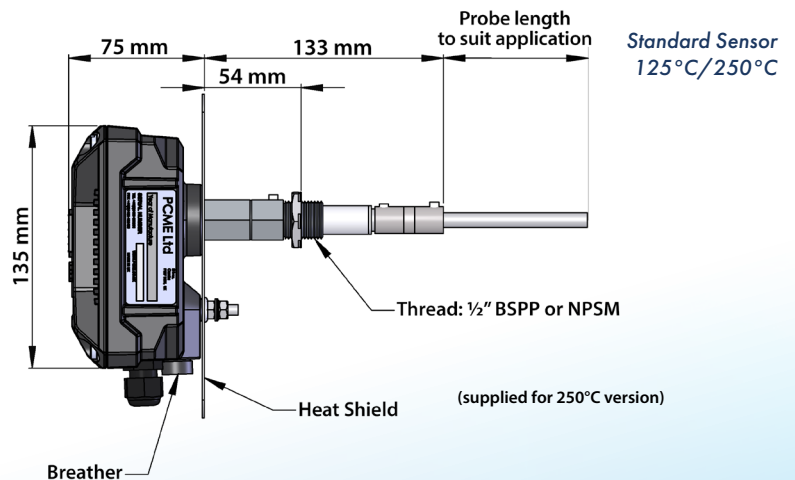
DUST ALARM 40	
Stack diameter	Up to 4 m (13 ft.)
Flue Gas Velocity	>4 m/s
Dust Level Response	<1 to 500 mg/m <sup>3</sup> (application dependent)
40 Sensor Specification	
Ambient Temperature	-20°C to +50°C (-4°F to 122°F)
Protection Rating	IP65
Weight	900 g (2 lb), excl. rod
Power Supply Voltage	24V DC (from the control unit)

40 Control Unit Specification	
Type	DUST ALARM 40 Controller
No. of Sensors/Channels	1
Display	Full-colour, anti-glare 2.8" LCD (4:3 ratio)
Weight	1.2 kg (2.7 lb)
Outputs (standard)	2x Alarm Relays (0.5A DC @24V)
Outputs (optional)	1x 4-20mA output (250 Ω, isolated)
Ambient Temperature	-20°C to +50°C (-4°F to +122°F)
Enclosure Protection Rating	IP66
Power Supply Voltage	80-230V AC (50/60 Hz)
Cable entries	3x M16 cable glands 1x M20 cable gland (for mains power cable)

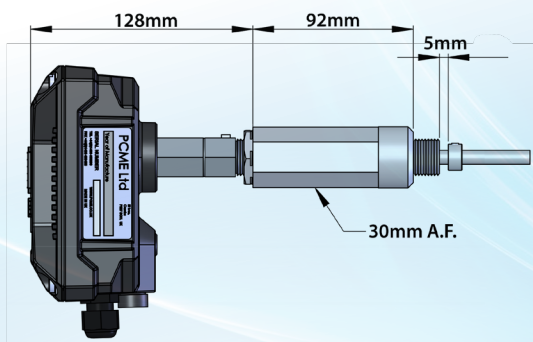
\*For other rod lengths please contact ENVEA UK or your local ENVEA representative.

\*\*The max. flue gas temperature for Ex sensors is 240°C (464°F).  
Note: For more information related to the product, options and order codes, refer to the PCME DUST ALARM 40 Order Codes Guide (available on request from ENVEA or your local ENVEA representative).

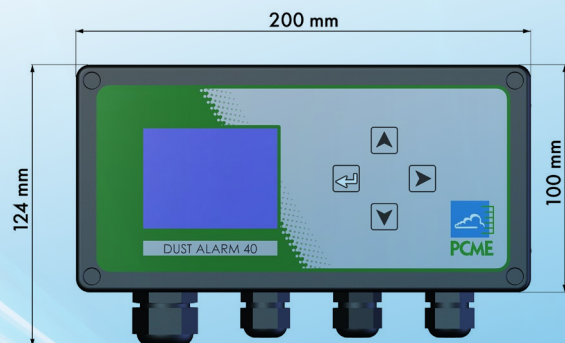
40 System Options			Order Code
Flue Gas Temperature	-20 to +125°C (-4°F to +257°F)	standard	125C
	-20 to +250°C (-4°F to +482°F)	option	250C
Rod Length*	100, 300, 600, or 1000 mm (4, 12, 24 or 40 in., nom.)	specify	RODxxxx
Rod Material	Stainless Steel	standard	S
Sensor Connection	½" British Standard Pipe (BSP)	standard	BSPP
	½" National Pipe (NPT)	FoC option	NPSM
Air Purge	None	standard	0
	½" Air purge unit, BSP	option	AP-BS
	½" Air purge unit, NPT	option	AP-NP
Outputs	No 4-20mA output	standard	0
	4-20mA output	option	420
Hazardous Zones**	Not required	standard	0
	ATEX Zone 2 (Gas) and 22 (Dust)	option	X



Standard Sensor with Air Purge



Control Unit



## ABOUT ENVEA

As a progressive environmental Company, ENVEA specialises in particulate measurement for industrial processes. With a worldwide reputation for reliability, innovation and technological excellence, the Company produces under the trademark envea™ equipment for concentration and mass monitoring for regulatory, environmental and process control requirements. 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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