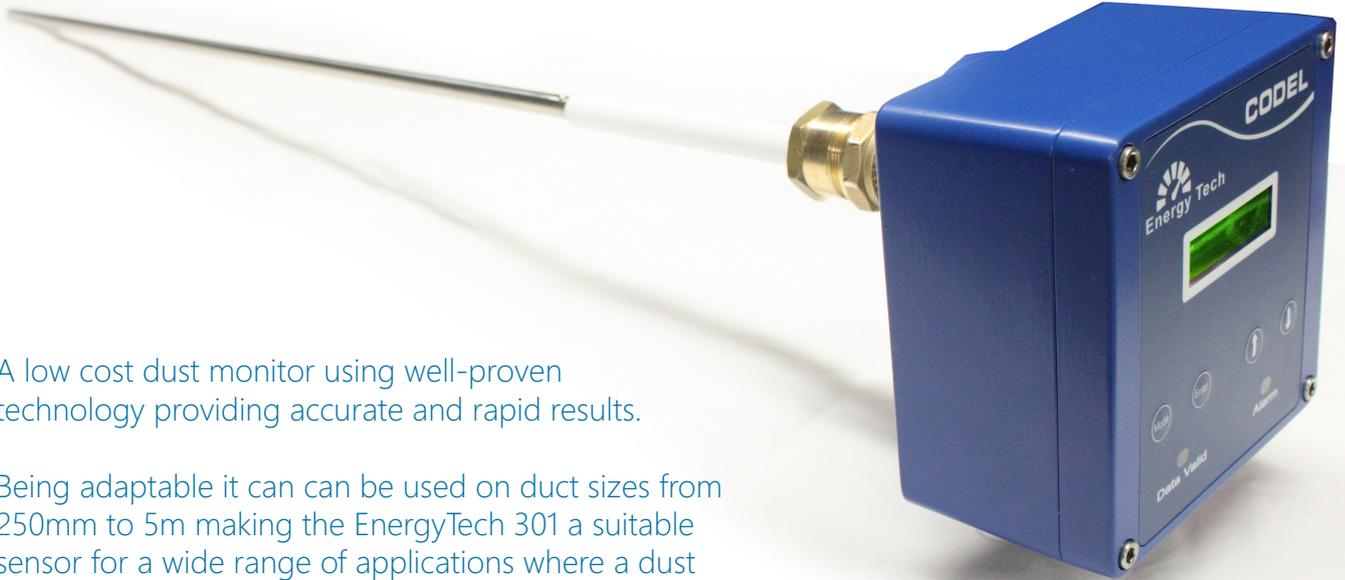


# CODEL

Monitoring Solutions

## EnergyTech 301 - Dust Monitor



A low cost dust monitor using well-proven technology providing accurate and rapid results.

Being adaptable it can be used on duct sizes from 250mm to 5m making the EnergyTech 301 a suitable sensor for a wide range of applications where a dust measurement is required.

Direct sensing method; actual particulate concentration

Automated Online zero and span checking facility

Integrated calibration function for mg/m<sup>3</sup> output

Minimal maintenance requirements

ISO 9001:2008

Quality Certification

Monitoring Solutions



[www.codel.co.uk](http://www.codel.co.uk)

EnergyTech 301 continuous dust monitor uses the well-proven tribo-electric sensor technology to directly measure mass particulate concentration by sensing the frictional charge created when particles collide with a conductor.

The advanced electronics of the EnergyTech 301 detect this signal and present it to the operator via RS485 or 4-20mA directly out from the sensor head. The EnergyTech 201 also features a built in display for viewing live sensor data as well as for configuration and calibration.

The measurement levels can be corrected to  $\text{mg}/\text{m}^3$  via an integrated calibration function.

The tribo-electric technique is extremely sensitive, capable of detecting dust concentrations of less than  $1\text{mg}/\text{m}^3$  in small ducts.

The EnergyTech 301 requires no critical alignment and has no optical surfaces to keep clean. The sensor is easy to install, requiring only a simple probe and is ideal for small duct sizes.

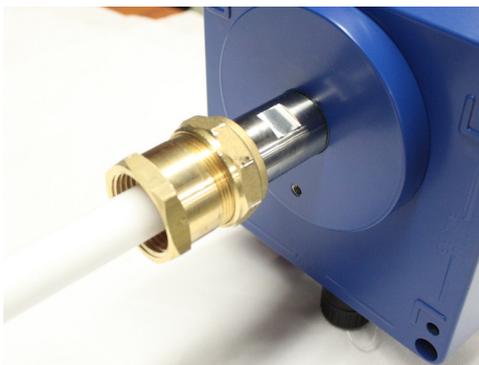
Minimal maintenance is required, infrequent probe cleaning and low installation costs make this technology extremely attractive for dust collector monitoring.



Adaptable, making it suitable for virtually all dust collectors

Rugged & robust design developed for easy installation and maintenance

Proven sample port design with minimal maintenance required



# Technical Specification

## Sensor Unit

Operating Principle	Tribo Electric
Operating Range	0.07 to 6500mg/m3 or 0 - 100%
Particle Size	0.1 to 100µm
Gain	0.5 to 1000
Resolution	0.01%
Response Time	1sec to 1hr (operator selectable)
Alarm Level	Programmable by user
Probe Lengths	250, 500, 750 & 1000mm
Flue Gas Temperature	0°C to +200°C
Ambient Temperature	-20°C to +55°C
Power Supply	85-265V AC (24V version available)
Construction	aluminium casting, weatherproof to IP67 (NEMA 4)
Dimensions (mm)	H160 x W160 x D90
Mounting Arrangement	Supplied 1" BSP, 100mm Long Stub Pipe

## Compliances

EMC	89/336/EEC directive compliant
Low Voltage	73/23/EEC directive compliant)

## Customer Interface

Analogue Outputs	4-20mA opto-isolated
Alarm Outputs	alarm relay 2.5A @ 24V
Digital Outputs	RS485 Modbus Bi-Directional
Display	32 Character alpha-numeric back-lit LCD)
Keypad	4-key soft-touch entry

## Compliances

Power	85-265V AC (24V version available)
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