

**IMR ET – MODEL 301 – DUST MONITOR**

IMR has just released the IMR ET 301, a new and advanced dust monitor evolving from tried and tested technology.

The new IMR ET 301 has dual capability as it can be used as an indicative monitor and also be calibrated in mg/m³ as a quantitative monitor. The sensor features an integral control unit with a display and input keys for set up.

The quantitative version has an automatic zero and span checking system to ensure drift is kept to a minimum.

The IMR ET 301 is a low cost dust monitor using well-proven technology providing accurate and rapid results. The IMR ET 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.

PRODUCT OVERVIEW

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 2m making the IMR ET 301 a suitable sensor for a wide range of applications where a dust measurement is required.



IMR ET 301 Dust Monitor

IMR ET 301 continuous dust monitor uses the well-proven 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 IMR ET 301 detect this signal and present it to the operator via RS485 or 4-20mA directly out from the sensor head. The IMR ET 301 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 mg/m³ via an integrated calibration function.

The technique is extremely sensitive, capable of detecting dust concentrations of less than 1mg/m³ in small ducts.

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KEY FEATURES

- Direct sensing method; actual particulate concentration
- Automated Online zero and span checking facility
- Integrated calibration function for mg/m³ output
- Easy installation with minimal maintenance required
- Adaptable; suitable for virtually all dust collectors
- Wide range of duct sizes from 250mm to 2m

TYPICAL APPLICATIONS

The IMR ET 301 a suitable sensor for a wide range of applications where a dust measurement is required.

FEATURES AND SYSTEM SPECIFICATIONS

- Operating Range: 0.07 to 6500mg/m³ or 0 – 100%
- Particle Size: 0.1 to 100µm
- Duct Diameter: 250mm to 2m
- Internal Flue Temperature: 200 °C
- Ambient Temperature: -20°C to +55°C
- Power supply: 48V DC supplied from Power Supply Unit (PSU)
- Construction: aluminum casting, weatherproof to IP67 (NEMA 4)
- Analogue outputs: 4-20mA opto-isolated
- Alarm output: alarm relay 2.5A @ 24V
- Digital Outputs: RS485 Modbus Bi-Directional